

AD-773 832

AN INTERFACE TO THE ARPA NETWORK FOR
THE CP/CMS TIME-SHARING SYSTEM.
VOLUME II. FLOW CHARTS

Joel M. Winett, et al

Massachusetts Institute of Technology

Prepared for:

Electronic Systems Division
Advanced Research Projects Agency

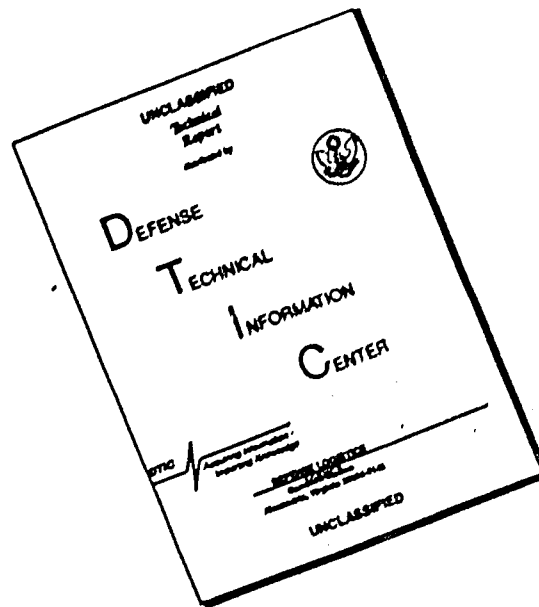
28 November 1973

DISTRIBUTED BY:

NTIS

National Technical Information Service
U. S. DEPARTMENT OF COMMERCE
5285 Port Royal Road, Springfield Va. 22151

DISCLAIMER NOTICE



THIS DOCUMENT IS BEST QUALITY AVAILABLE. THE COPY FURNISHED TO DTIC CONTAINED A SIGNIFICANT NUMBER OF PAGES WHICH DO NOT REPRODUCE LEGIBLY.

AD 773 832

DOCUMENT CONTROL DATA - R&D

(Security classification of title, body of abstract and indexing annotation must be entered when the overall report is classified)

1. ORIGINATING ACTIVITY (Corporate author) Lincoln Laboratory, M.I.T.		2a. REPORT SECURITY CLASSIFICATION Unclassified	
		2b. GROUP	
3. REPORT TITLE An Interface to the ARPA Network for the CP/CMS Time-Sharing System - Volume II: Flow Charts			
4. DESCRIPTIVE NOTES (Type of report and inclusive dates) Technical Note			
5. AUTHOR(S) (Last name, first name, initial) Winnett, Joel M. and Sammes, Anthony J.			
6. REPORT DATE 28 November 1973		7a. TOTAL NO. OF PAGES 174	7b. NO. OF REFS 0
8a. CONTRACT OR GRANT NO. F19628-73-C-0002		9a. ORIGINATOR'S REPORT NUMBER(S) Technical Note 1973-50 - Vol. II	
b. PROJECT NO. ARPA Order 600		9b. OTHER REPORT NO(S) (Any other numbers that may be assigned this report) ESD-TR-73-337	
c.			
d.			
10. AVAILABILITY/LIMITATION NOTICES Approved for public release; distribution unlimited.			
11. SUPPLEMENTARY NOTES Supplement to ESD-TR-73-336		12. SPONSORING MILITARY ACTIVITY Advanced Research Projects Agency, Department of Defense	
13. ABSTRACT <p>The interface to the ARPA network consists of a Network Control Program (NCP) which handles Host to Host communications, a LOGGER/SERVER for providing access to a CP virtual machine from the network, and a user subroutine package for communicating with other Hosts on the network from a logged on CP virtual machine operating in the CMS environment. The NCP and the LOGGER each run in separate virtual machines; the NCP handling the I/O operations with the IMP and the LOGGER handling pseudo I/O operations with CP through a software supported virtual terminal device. CMS virtual machines communicate with the NCP virtual machine through a special virtual machine to virtual machine communications facility.</p> <p>Volume I describes the routines which make up the NCP and the LOCCER. Volume II includes flow charts on the logic for each of these routines.</p> <p>Reproduced by NATIONAL TECHNICAL INFORMATION SERVICE U. S. Department of Commerce Springfield, MA 01114</p>			
14. KEY WORDS ARPA network time-sharing system IBM 360/67 virtual machines			

MASSACHUSETTS INSTITUTE OF TECHNOLOGY
LINCOLN LABORATORY

AN INTERFACE TO THE ARPA NETWORK
FOR THE CP/CMS TIME-SHARING SYSTEM
VOLUME II: FLOW CHARTS

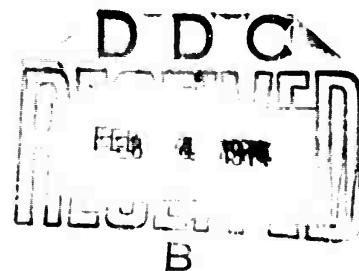
J. M. WINETT

A. J. SAMMES

Group 28

TECHNICAL NOTE 1973-50

28 NOVEMBER 1973

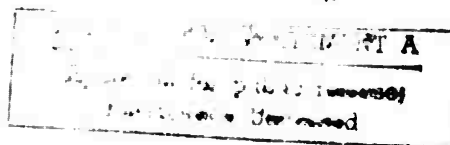


Approved for public release; distribution unlimited.

LEXINGTON

ii.

MASSACHUSETTS



The work reported in this document was performed at Lincoln Laboratory, a center for research operated by Massachusetts Institute of Technology. This work was sponsored by the Advanced Research Projects Agency of the Department of Defense under Air Force Contract F19628-76C-0230 (ARPA Order 600).

This report may be reproduced to satisfy needs of U.S. Government agencies.

Table of Contents
Volume II: Flowcharts

- A. NCPINIT Flowchart
- B. NCPMAIN Flowchart
- C. NCPXFER Flowchart
- D. NCPIMPI Flowchart
- E. NCPIMPC Flowchart
- F. NCPMONIT Flowchart
- G. LOGMAIN Flowchart
- H. LOGDEV Flowchart
- I. LOGST Flowchart

These flowcharts have been produced from the source code using the AUTOFLOW Computer Documentation System written by Applied Data Research, Inc. and run on the IBM 360/67 computer at Lincoln Laboratory.

CHART TITLE - 'INITIALISING ROUTINES'

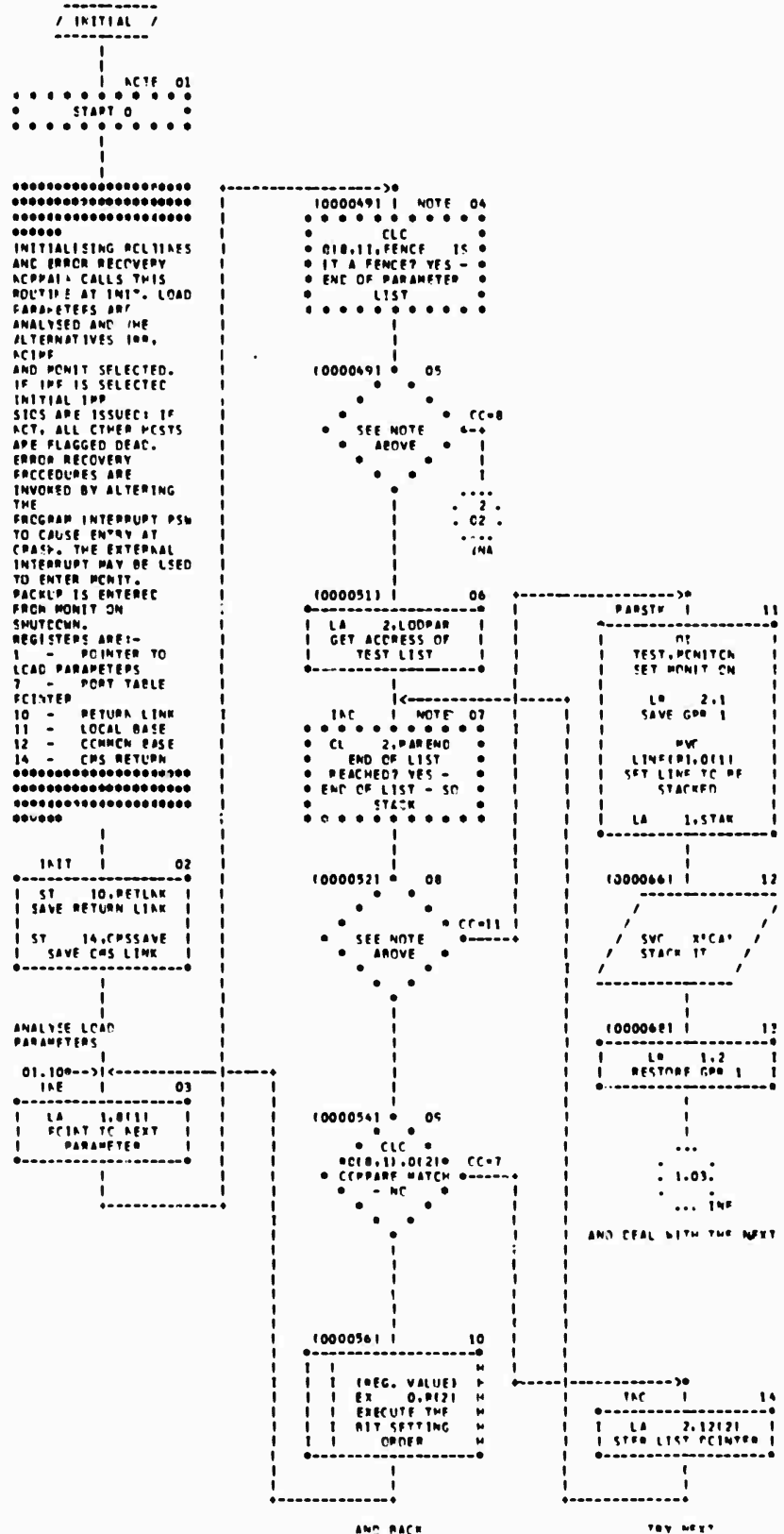


CHART TITLE - 'INITIALISING ROUTINES'

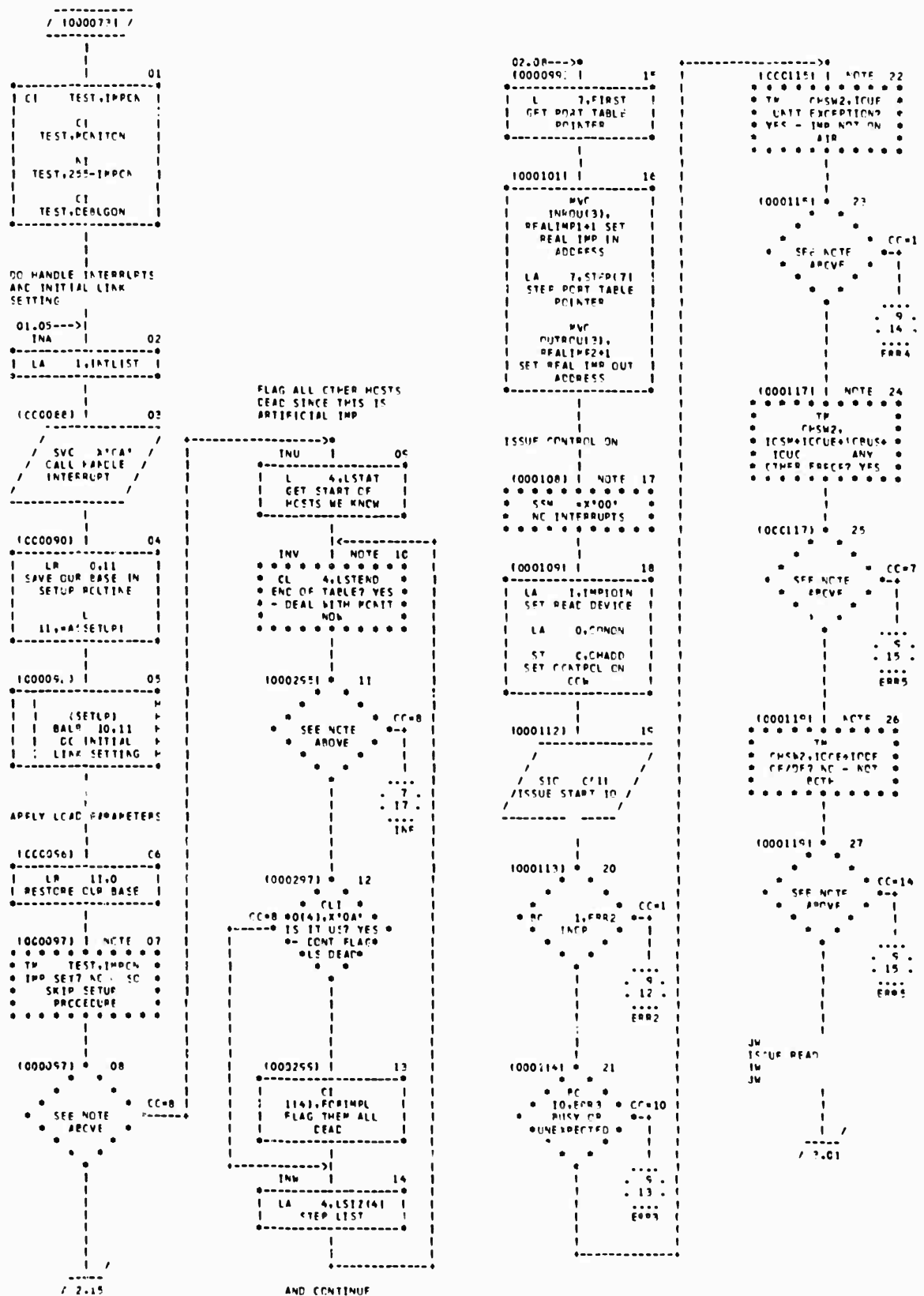


CHART TITLE - 'INITIALISING ROUTINES'

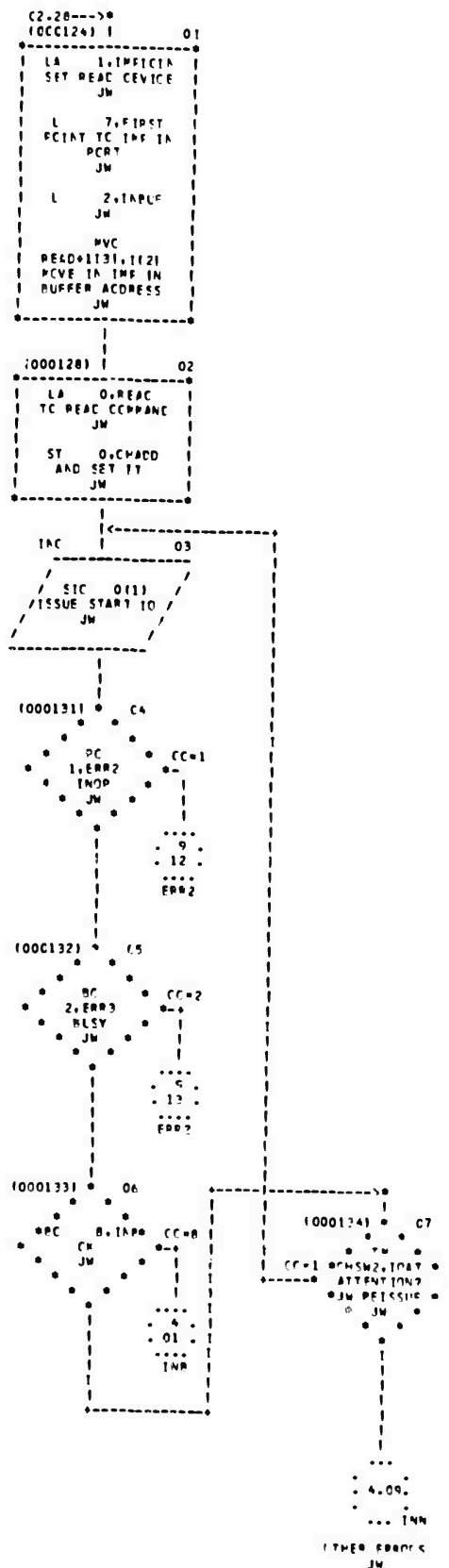


CHART TITLE - 'INITIALIZING ROUTINES'

JW

C3.C69-->0

ISSUE NO CP HEADERS

```

1000142) 1 01
  LA 3,4
  SET CCLNT
  
```

```

C3.C6-->1
  INK 1 NOTE 02
  SSM =X'00'
  AC INTERRUPTS
  
```

```

1000144) 1 03
  LA 1,IPFICCLT
  SET WRITE DEVICE
  LA 0,ACCP
  ST 0,CHACT
  SET NO CP MESSAGE
  
```

```

  INQ 1
  SIC C111
  ISSUE START 10
  
```

```

1000148) 1 05
  BC 1,ERR2
  INOP
  CC=1
  
```

```

  C 12
  ERR2
  
```

```

1000149) 1 06
  BC 2,ERR3
  BUSY
  CC=2
  
```

```

  C 9
  C 13
  ERR3
  
```

```

1000150) 1 07
  BC 1,TAJ
  CH
  CC=P
  
```

```

  C 4
  C 14
  TAJ
  
```

```

  C 15
  ERR5
  
```

ELSE FROM 5

```

1000151) 1 08
  CC=1
  TM CHSW2,ICAT
  ATTENTION?
  REISSUE
  
```

```

03.07-->1
  INK 1 NOTE 05
  TM CHSW2,ICAT
  UNIT EXCEPTION?
  YES - IMP ACT CA
  THE ATP
  JW
  
```

```

1000153) 1 10
  SEE NOTE ABOVE
  CC=1
  
```

```

  C 17
  ERR7
  
```

```

  C 15
  ERR5
  
```

```

  C 15
  ERR5
  
```

JW
WAIT FOR INTERRUPT
JW
JW

```

04.C7-->0
  TAJ 1 14
  LA 1,WAIT1
  WAIT FOR INTERRUPT
  DEVICE
  
```

```

1000161) 1 NOTE 15
  CSM =X'00'
  ALLOW INTERRUPTS
  JW
  
```

```

1000162) 1 16
  SVF X'00'
  
```

```

1000164) 1 NOTE 17
  CLC
  INTERRUPT1,
  RELATIM011
  IF TAPL79 YES, GO
  HANDLE IT
  JW
  
```

```

1000164) 1 18
  SEE NOTE ABOVE
  CC=8
  
```

```

  C 6
  C 09
  INP
  
```

```

1000166) 1 19
  L 7,IPDET
  LA 7,STEP17
  PRINT TO THE CLT
  CONT
  
```

```

  C 1
  
```

```

  C 17
  ERR7
  
```

```

1000168) 1 12
  DT TEST,IMPLE
  SET IIF RECEIVED
  JW
  
```

```

  C 4
  C 15
  ERR5
  
```

```

  C 15
  ERR5
  
```

RESTART INITIALIZATION

JW

CHART TITLE - "INITIALIZING ROUTINES"

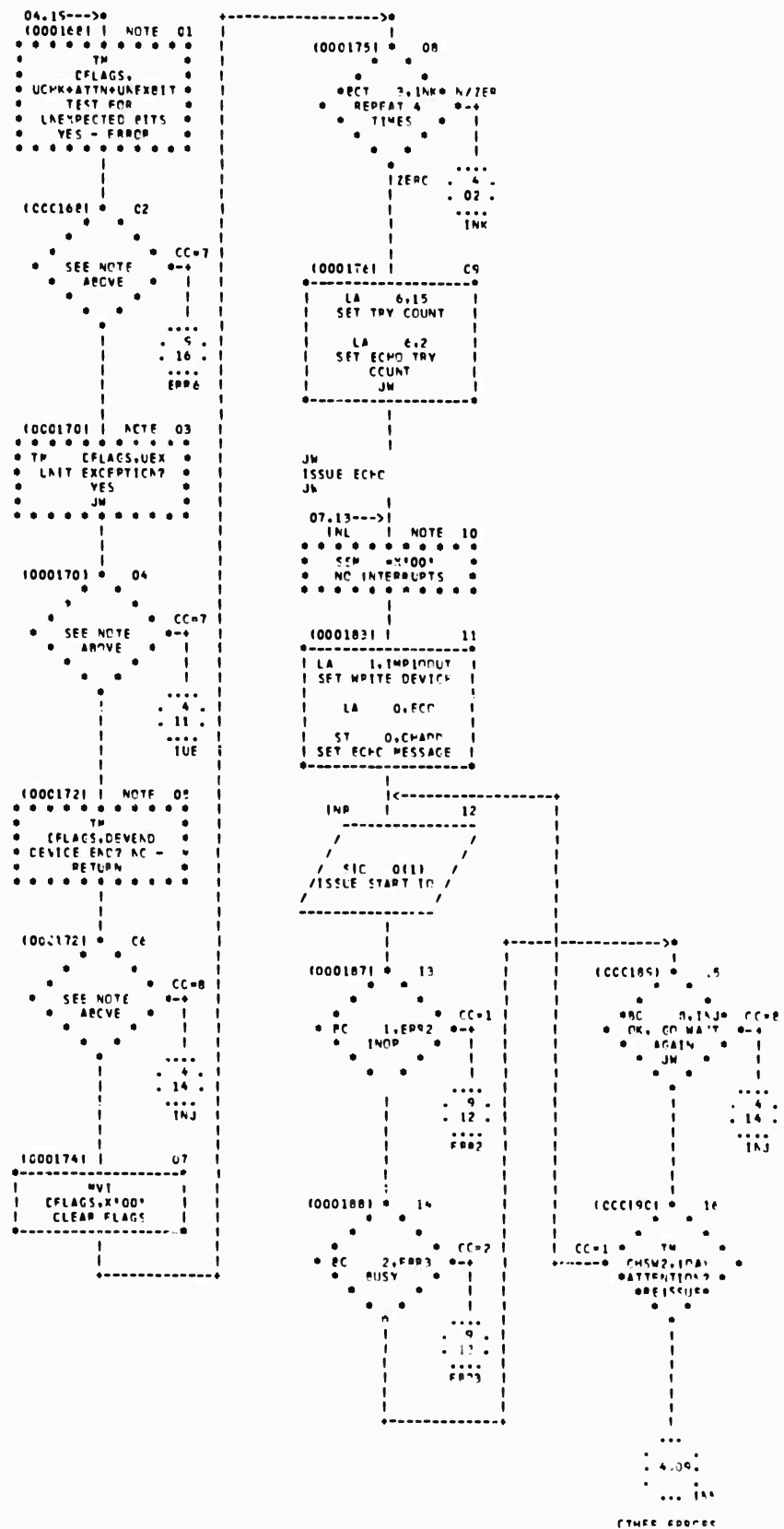
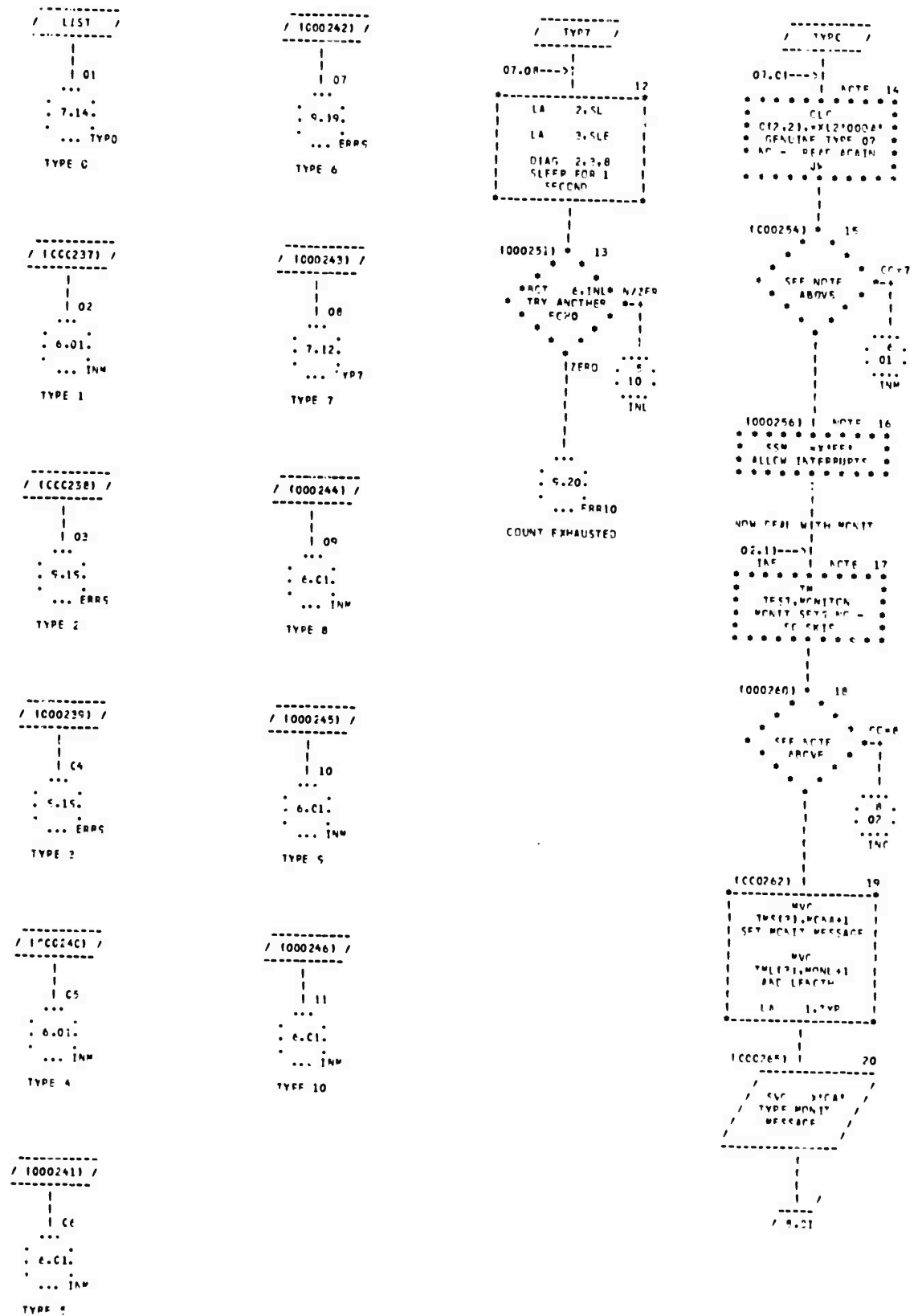


CHART TITLE - "INITIALISING ROUTINES"



CHAPT TITLE - 'INFLUENCING REFINES'

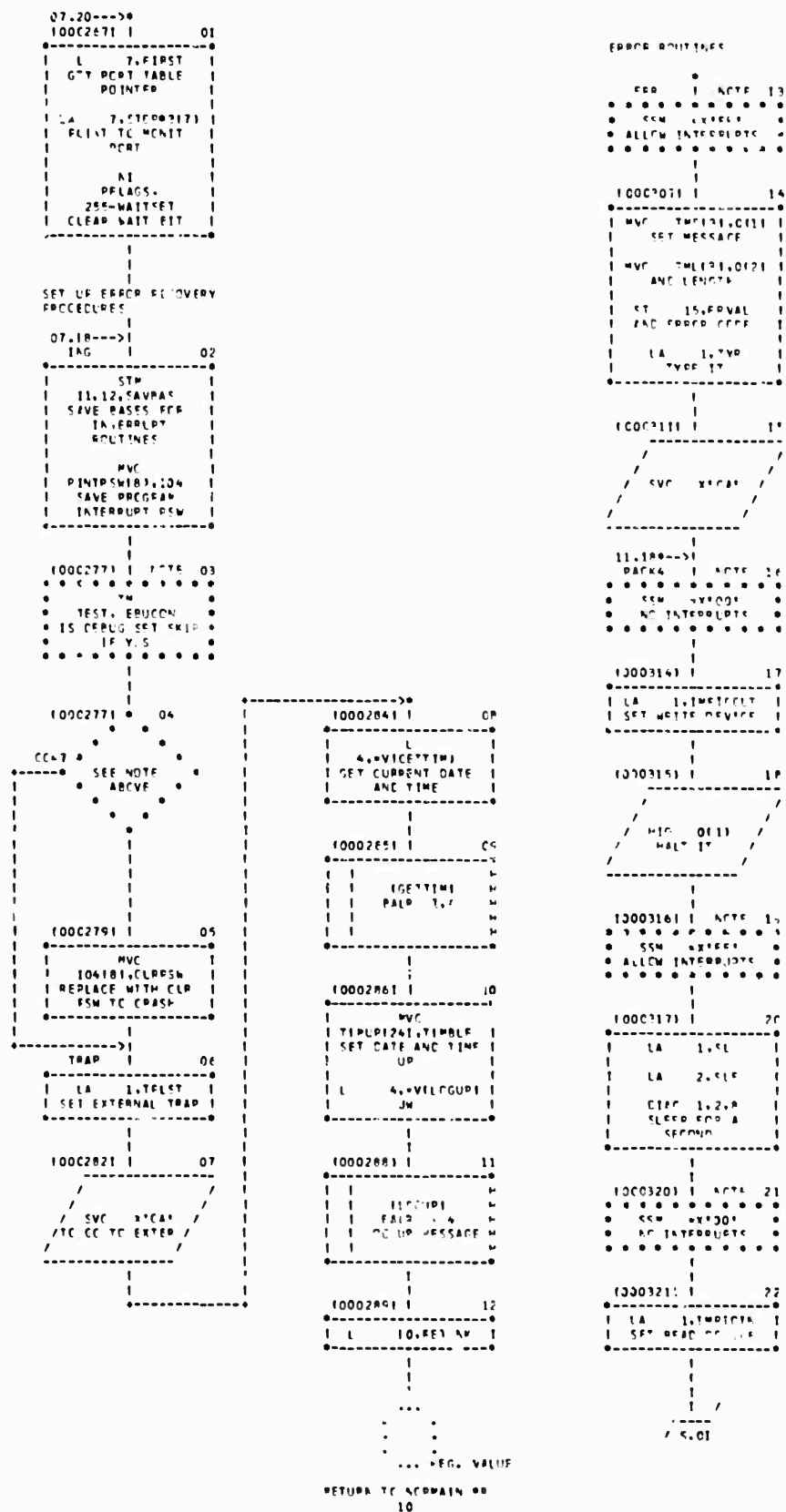


CHART TITLE - 'INITIALISING ROUTINES'

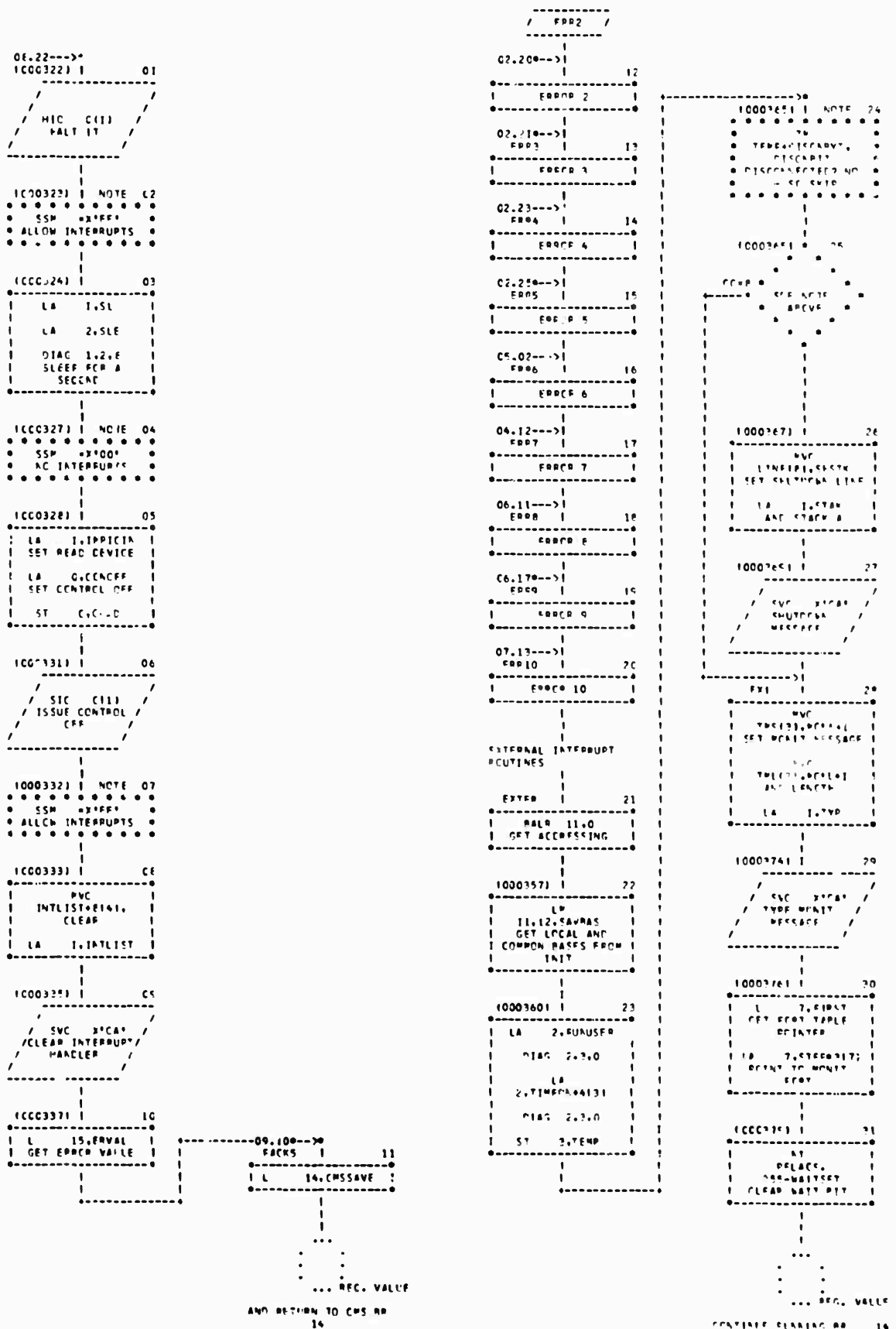


CHART TITLE - 'INITIALISING ROUTINES'

CRASH ROUTINES

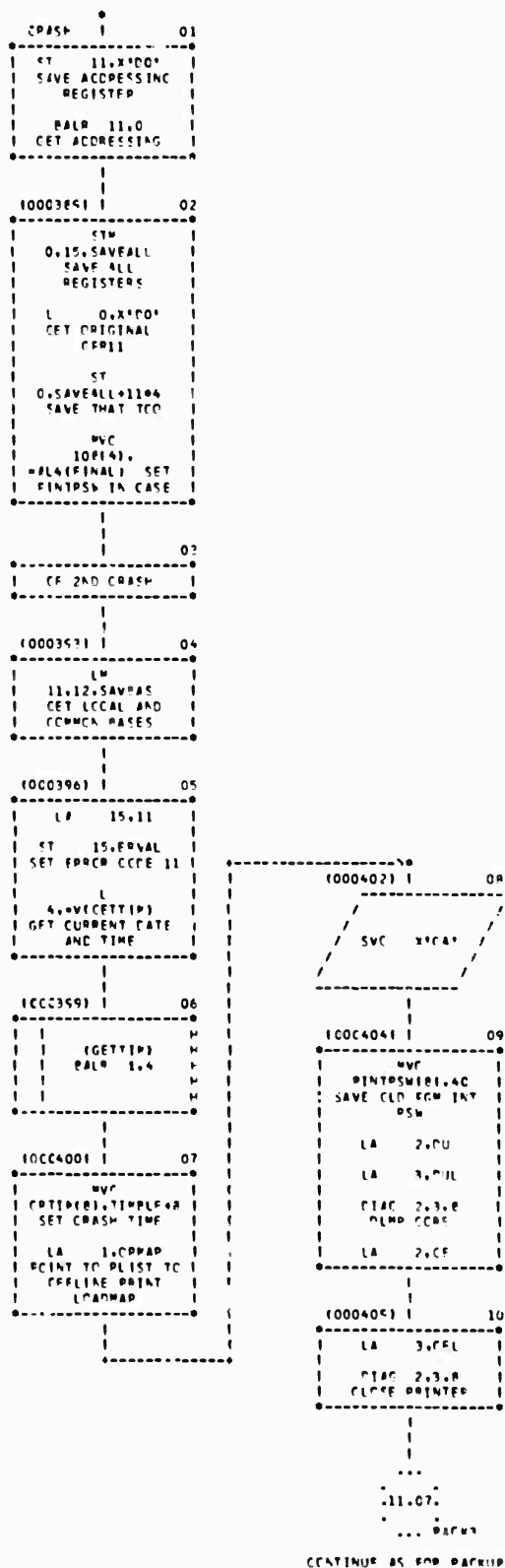


CHART TITLE - 'INITIALISING ROUTINES'

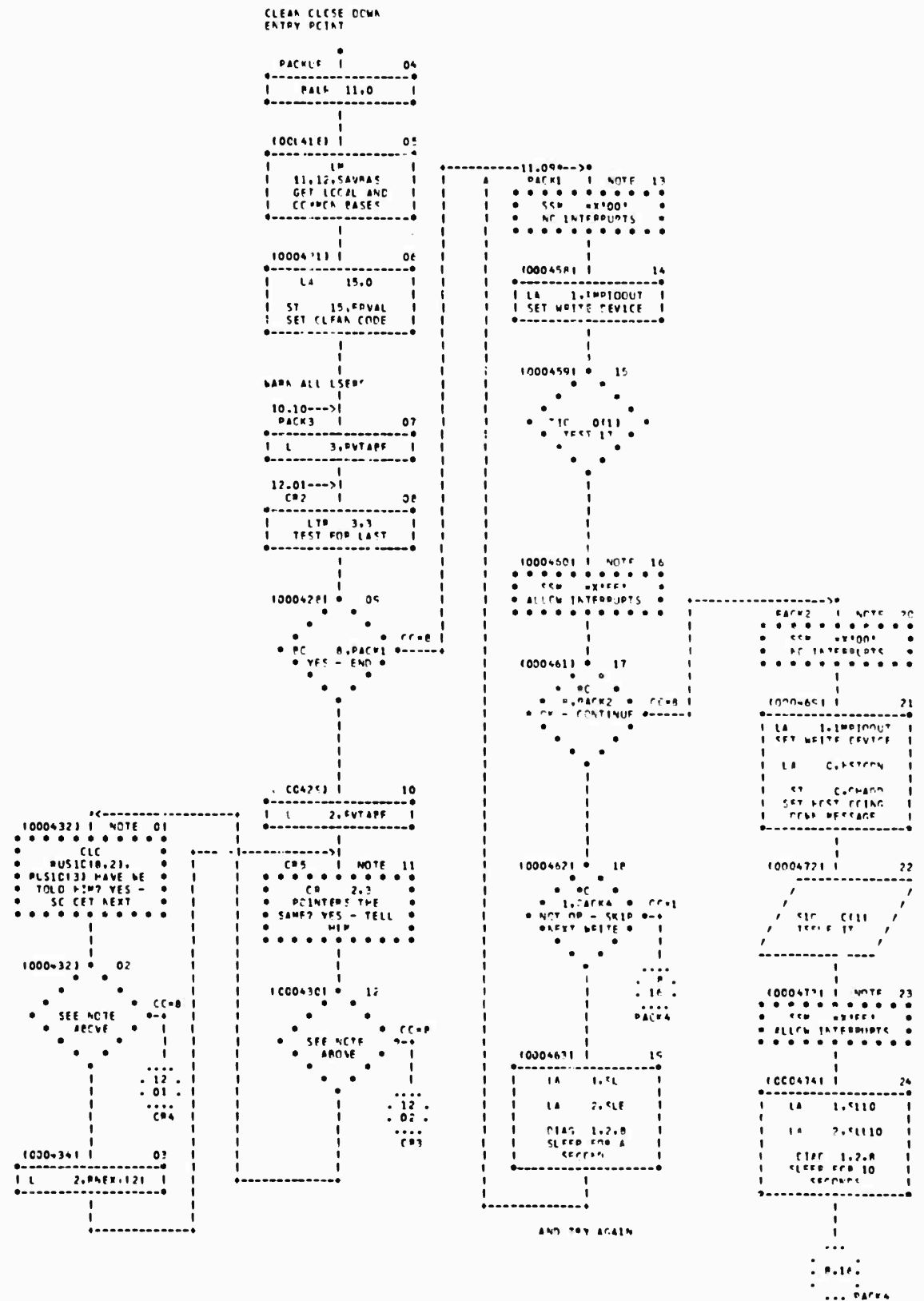


CHART TITLE - 'INITIALISING RELTIMES'

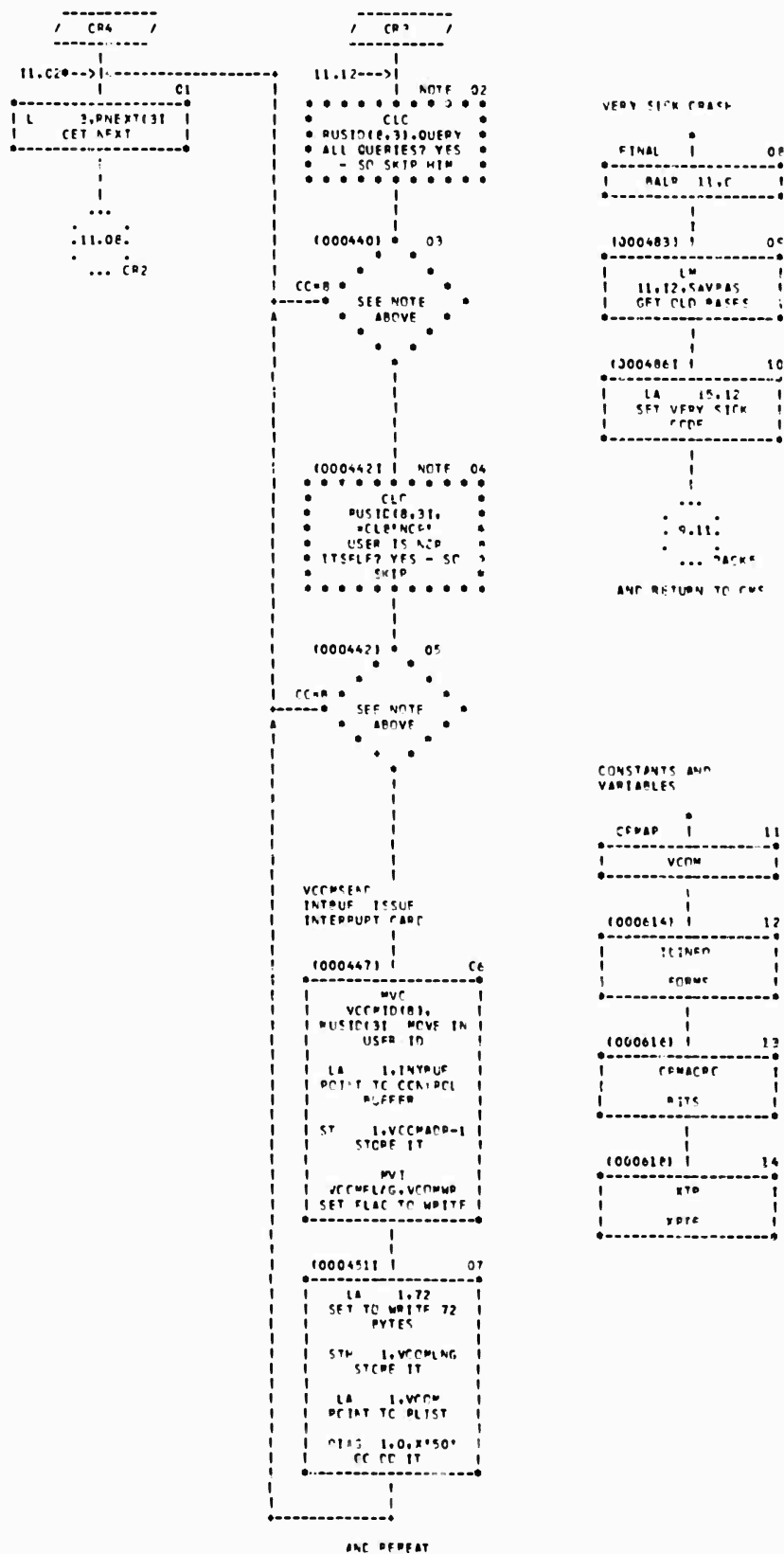


CHART TITLE - EQU STATEMENTS

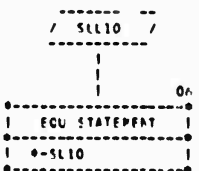
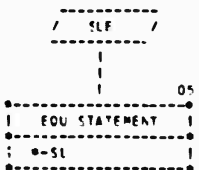
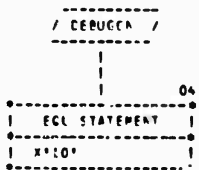
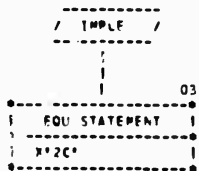
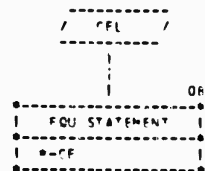
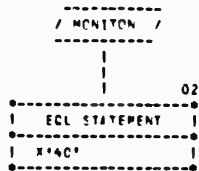
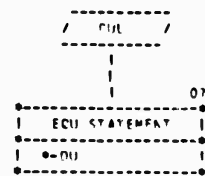
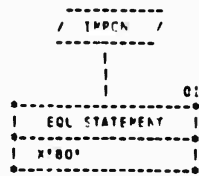


CHART TITLE - CONSTANTS AND STORAGE AREAS

(000067)		DC	AL4(0+4)	
(000072)	LCOPAR	DC	CLB(0)MF1	
(000074)		DC	CLB(0)CA)Y1	
(000076)		DC	CLB(0)C)MF1	
(000078)		DC	CLB(0)CERIG1	
(000081)	FA7FAR	DC	AL4(0)	
(000085)		DC	AL4(0+4)	
(000163)		DC	AL4(0+4)	
(000266)		DC	AL4(0+4)	
(000287)		DC	AL4(0+4)	
(000332)		DC	AL4(0+4)	
(000336)		DC	AL4(0+4)	
(000370)		DC	AL4(0+4)	
(000375)		DC	AL4(0+4)	
(000403)		DC	AL4(0+4)	
(000452)	REALIMP1	DC	AL4(0)MPIN	
(000453)	REALIMP2	DC	AL4(0)MPCLT	
(000454)		DS	1C	
(000455)	CURPSW	DC	AL4(0)CICCCCC1	
(000456)		DC	AL4(CRASH)	
(000457)	SAVEBAS	DC	2F(0)	
(000458)	SETLAK	DC	1F(0)	
(000459)	TEST	DC	1F(0)	
(000513)	ACFCMC	DC	X*040A0000	MESSAGE TYPE 4
(000514)	PGFCMC	DC	X*020A0000	MESSAGE TYPE 2
(000515)	ECFCMC	DC	X*0CCACCCC	HEADER MESSAGE TYPE 0
(000516)		DC	X*000BC002	BYTE SIZE, LENGTH
(000517)		DC	X*0CC5F00	TYPE, DATA
(000519)	QUERY	DC	CLB(0)77777771	
(000521)	MCRA	DC	AL4(PCAMS)	
(000523)	MPAPS	DC	CLB(MCINT...)	
(000524)	MCNL	DC	AL4(0-MCAMS)	
(000526)	TEMP	DC	1F(0)	
(000527)	SAVFALL	DS	1EF	
(000528)	CRTH	DC	2F(0)	CRASH TIME
(000532)	CLEAR	DC	CLB(0)CLB	
(000533)	INTLIST	DC	CLB(MCINT...)	INTERRUPT
(000534)		DC	CLB(0)CLB	HEADER
(000535)		DC	CLB(0)MP1, AL4(0)ATF8, AL2(0)MP...IN, CL2(0)AK	
(000536)		DC	CLB(0)MP2, AL4(0)ATF8, AL2(0)MP...IN, CL2(0)AK	
(000537)		DC	CLB(0)VCFM, AL4(0)ATF8, AL2(0)OFC, CL2(0)AK	
(000538)		DC	1F(0)-1	
(000541)	TPLEST	DC	CLB(0)OAP	
(000542)		DC	AL4(0)ATF8	
(000543)	TPP	DC	CLB(0)TPPLIN	
(000546)		DC	AL1(1)	
(000547)	TPS	DC	AL2(0-0)	

CHART TITLE - CONSTANTS AND STORAGE AREAS

1000548)	DC	C'8'
1000549)	DC	AL3(9-0)
1000550)	DC	CL8'ATTN'
1000551)	DC	CL4'FIFC'
1000552)	DC	AL1(8)
1000553)	DC	AL3(LINE)
1000554)	DC	CL8'
1000555)	DC	CL8'SHUTDCB'
1000556)	DC	CL8'WAIT'
1000557)	DC	CL4'IMP1'
1000558)	DC	CL4'IMP2'
1000559)	DC	IF'0'
1000560)	DC	IF'0'
1000561)	DC	CL8'OFFLINE'
1000562)	DC	CL8'PRINT'
1000563)	DC	CL8'NCB'
1000564)	DC	CL8'LEADPAG'
1000565)	DC	2'-1'
1000566)	DC	C'800 PARAMETER LIST'
1000567)	DC	AL3(9-P1)
1000568)	DC	C'IMP INOPERABLE - CONDITION CODE 3'
1000569)	DC	AL3(9-P2)
1000570)	DC	C'IMP BUSY - CONDITION CODE 2'
1000571)	DC	AL3(9-P3)
1000572)	DC	C'IMP NOT ON AIR - INITIAL STATUS'
1000573)	DC	AL3(9-P4)
1000574)	DC	C'IMP INITIAL STATUS ERROR'
1000575)	DC	AL3(9-P5)
1000576)	DC	C'IMP WRITE ERROR'
1000577)	DC	AL3(9-P6)
1000578)	DC	C'IMP BECAME NOT READY'
1000579)	DC	AL3(9-P7)
1000580)	DC	C'IMP READ ERROR'
1000581)	DC	AL3(9-P8)
1000582)	DC	C'UNEXPECTED MESSAGE FROM IMP - ERROR'
1000583)	DC	AL3(9-P9)
1000584)	DC	C'ECHO COUNT EXHAUSTED'
1000585)	DC	AL3(9-P10)
1000586)	DC	C'SL 1'
1000587)	DC	C'SL 10'
1000588)	DC	C'CU 12000-30000'
1000589)	DC	C'C 1'
1000590)	DC	XL1'08'
1000591)	DC	18'00'
1000592)	DC	XL4'00000600'
1000593)	DC	21'00'

CHART TITLE - "NETWORK CONTROL PROGRAM"

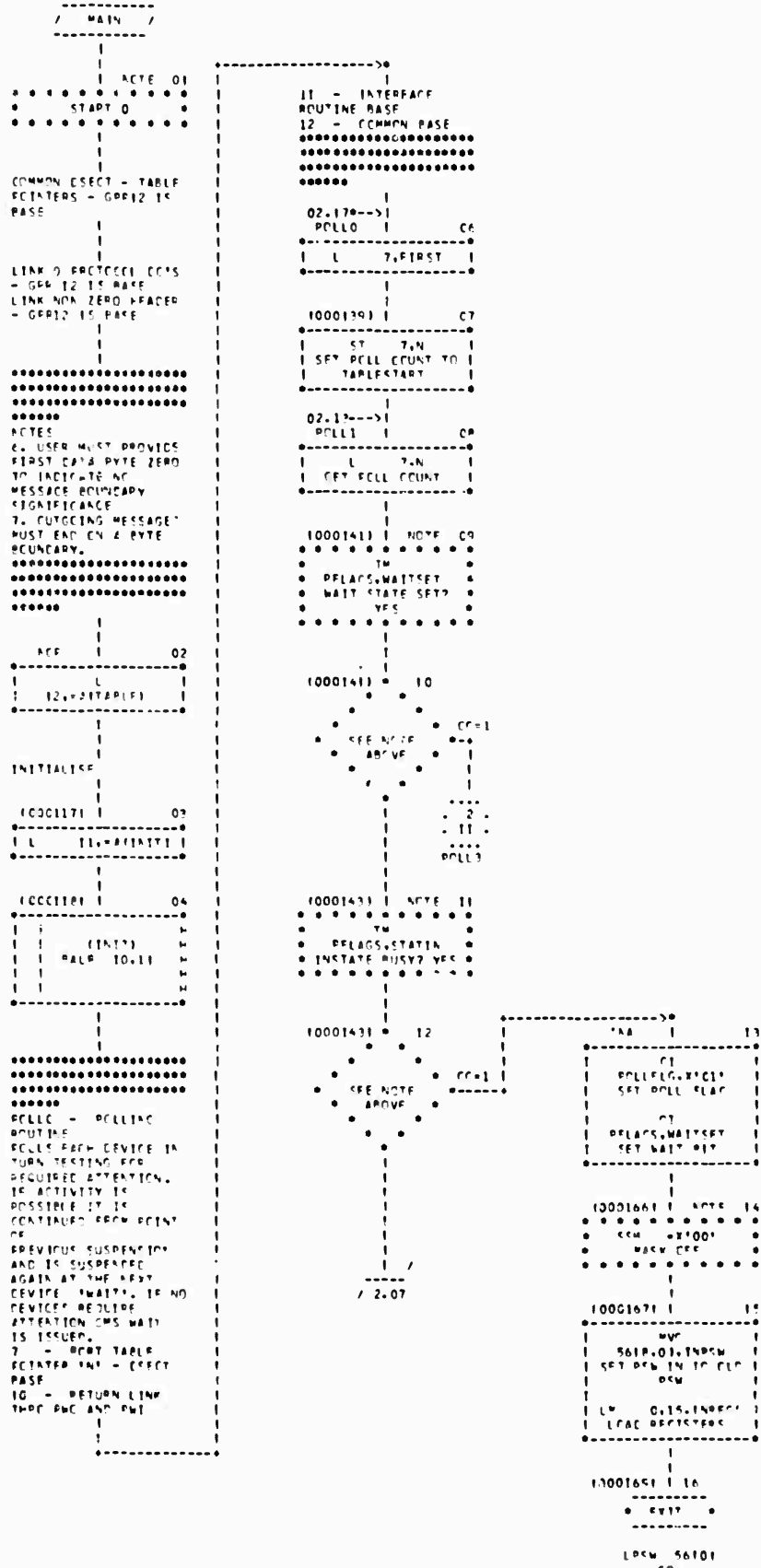


CHART TITLE - 'NETWORK CONTROL PROGRAM'

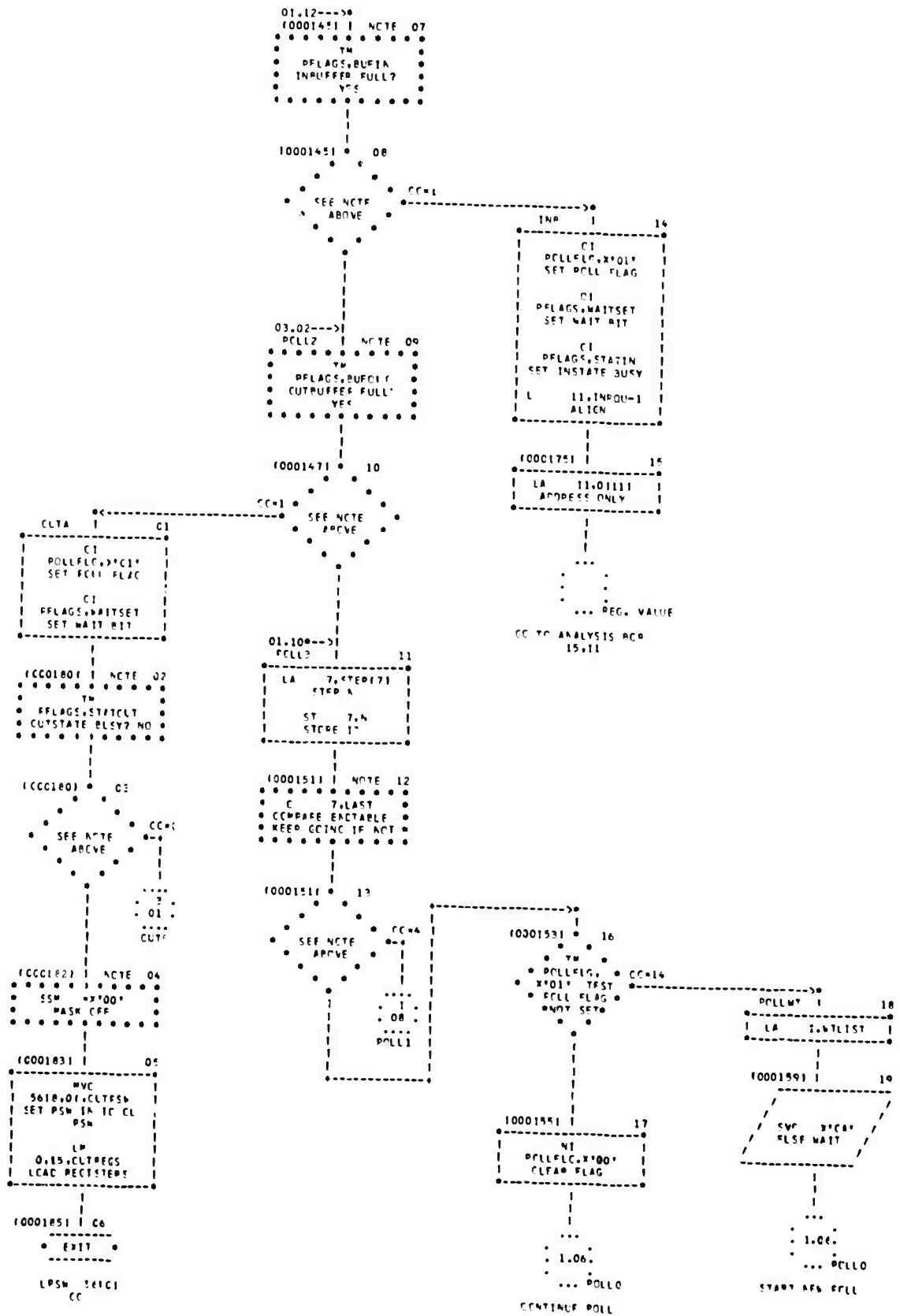


CHART TITLE - 'NETWORK CONTROL PROGRAM'

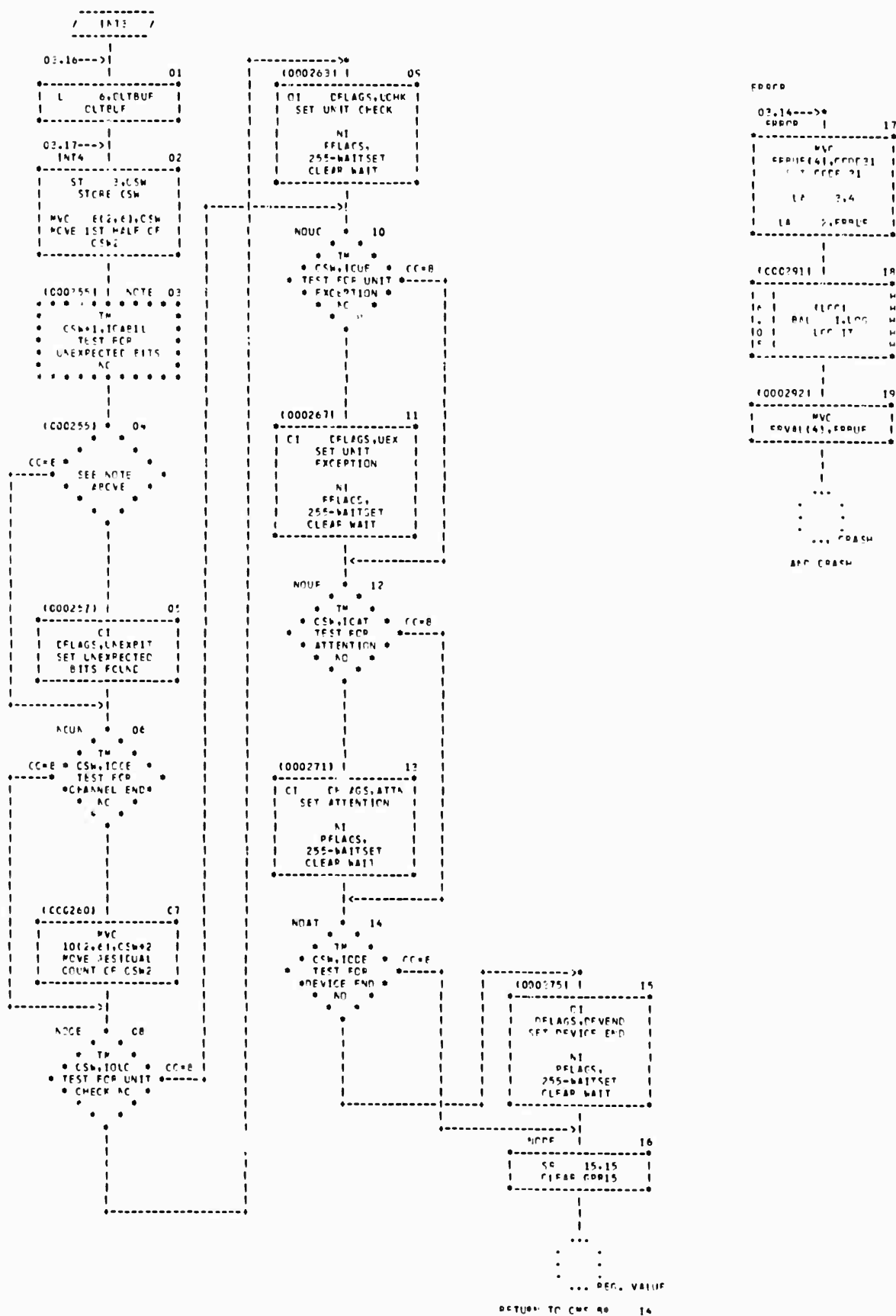
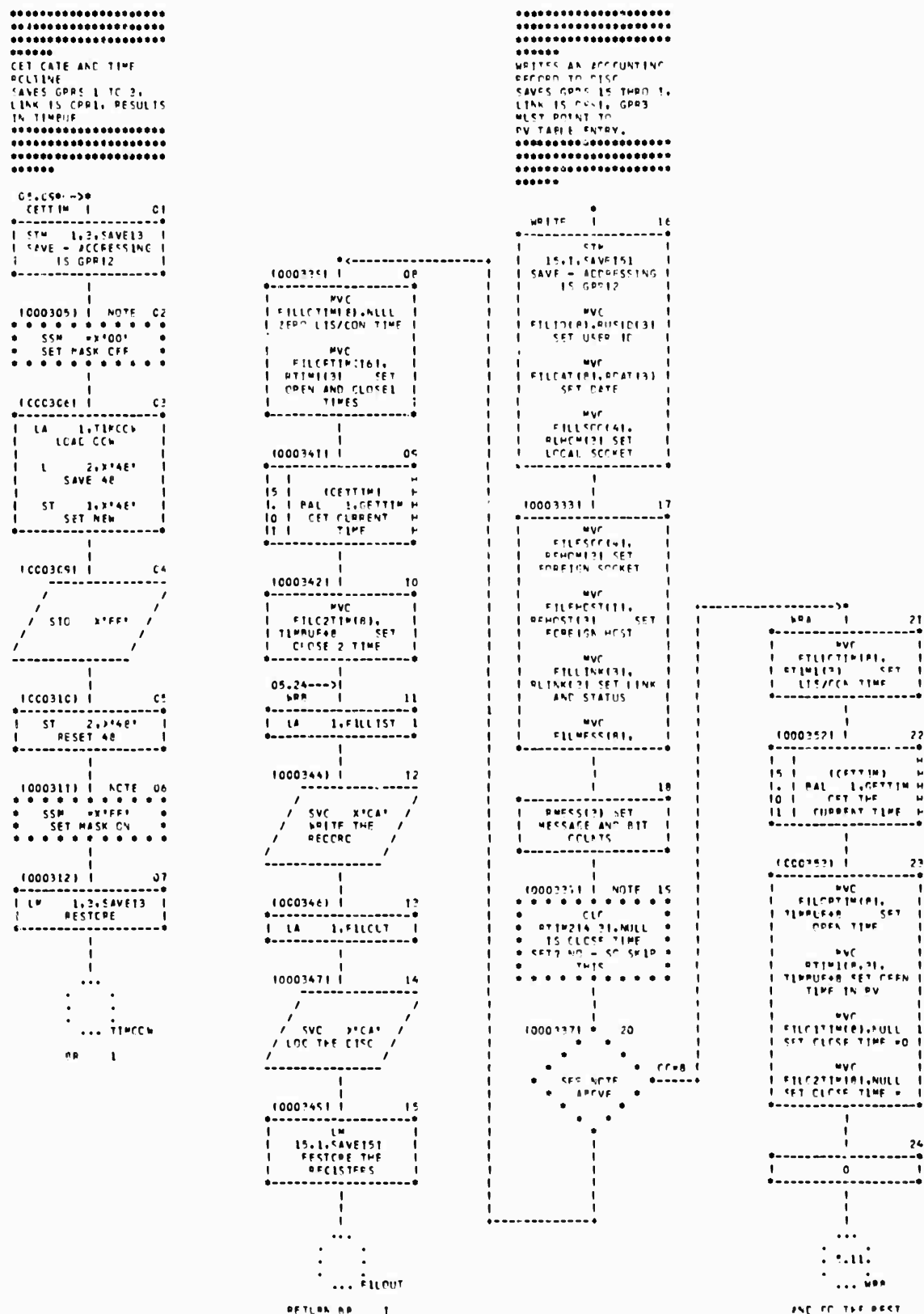


CHART TITLE - 'NETWORK CONTROL PROGRAM'



PART TITLE - 'NETWORK CONTROL PROGRAM'

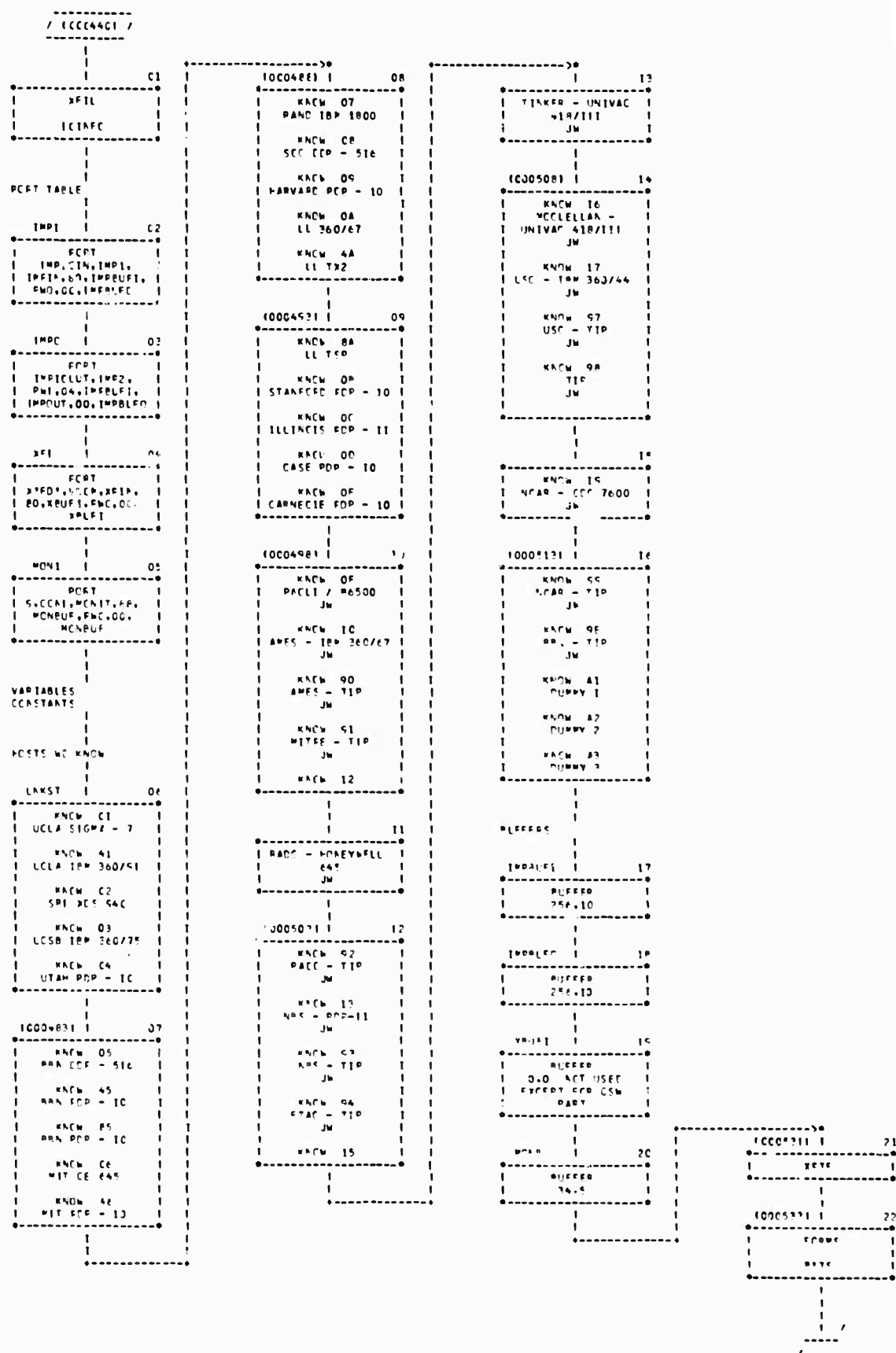


CHART TITLE - CONSTANTS AND STORAGE AREAS

(000028)	FVTRF	CC	1F'0'	FIRST ENTRY OF RV TABLE
(000029)	FVTRL	CC	1F'0'	LAST ENTRY OF RV TABLE
(000030)	IMDC	CC	2F'0'	HEAD AND TAIL OF IMPE ACTIVE C
(000031)	SYSTAT	CC	1F'0'	SYSTEM STATUS WORD
(000032)	FIRST	CC	AL4(IMP1)	FIRST ENTRY OF PORT TABLE
(000033)	LAST	CC	AL4(PCRL)	FIRST ITEM AFTER PORT TABLE
(000034)	A	C	1F'0'	PORT TABLE PCINTER
(000035)	LSTAT	CC	AL4(LNKST)	HOSTS WE KNOW
(000036)	LSTEND	CC	AL4(MEND)	FIRST ITEM AFTER HOSTS WE KNOW
(000037)	TIMEPLF	CC	3C'0'	DATE - TIME BUFFERS
(000038)	PVAC	CC	1F'0'	TOTAL NUMBER OF RV ENTRIES
(000039)	MESSNC	CC	1F'0'	TOTAL NUMBER OF MESSAGES TRANSFERRED
(000040)	BITAC	CC	1F'0'	TOTAL NUMBER OF BITS TRANSFERRED
(000041)	TIMEUP	CC	6F'0'	DATE - TIME UP
(000042)	CMSAVE	CC	1F'0'	CMS RETURN
(000043)	FINTFEB	CC	2F'0'	PROGRAM INTERRUPT PSM
(000044)	ERVAL	CC	F'0'	ERROR CODE ON RETURN
(000045)	ACPFCD	CC	H'24',H'0C'	
(000050)		CC	5X'00',X'08',H'1',X'00'	
(000051)		CC	X'00',5X'00'	
(000052)	FTSFC-	CC	H'1',H'152'	
(000053)		CC	9X'00',X'08',H'10',X'00'	
(000054)		CC	X'01',14X'00'	
(000055)	STARFCR	CC	H'32',H'152'	
(000056)		CC	5X'00',X'08',H'10',X'0'	
(000057)		CC	X'02',14X'00'	
(000058)	CLSFCD	CC	H'32',H'144'	
(000059)		CC	5X'00',X'08',H'9',X'00'	
(000060)		CC	J3',14X'00'	
(000061)	ALLFCR	CC	H'32',H'136'	
(000062)		CC	5X'00',X'08',H'8',X'00'	
(000063)		CC	X'04',14X'00'	
(000064)	CVBFCD	CC	H'24',H'104'	
(000065)		CC	5X'00',X'08',H'4',X'00'	
(000066)		CC	X'05',6X'00'	
(000067)	RETFCD	CC	H'32',H'136'	
(000068)		CC	5X'00',X'08',H'8',X'00'	
(000069)		CC	X'05',14X'00'	
(000070)	INPFCD	CC	H'24',H'104'	
(000071)		CC	5X'00',X'08',H'2',X'00'	
(000072)		CC	X'07',6X'00'	
(000073)	INSFCD	CC	H'24',H'104'	
(000074)		CC	5X'00',X'08',H'2',X'00'	
(000075)		CC	X'08',6X'00'	
(000076)	ELPFCD	CC	H'24',H'104'	
(000077)		CC	5X'00',X'08',H'2',X'00'	
(000078)		CC	X'09',6X'00'	

CHART TITLE - CONSTANTS AND STORAGE AREAS

(000070)	ERRFCR	CC	H'24',H'88'	
(000080)		DC	S'0CC',X'0E',H'12',X'00'	
(000081)		DC	X'0A',6X'00'	
(000082)	ERRFCR	CC	H'32',H'168'	
(000083)		DC	S'00',X'0E',H'12',X'00'	
(000084)		DC	X'0B',14X'CC'	
(000085)	ESTFCR	CC	H'24',H'80'	
(000086)		DC	S'00',X'0E',H'1',X'00'	
(000087)		DC	X'CC',6X'00'	
(000088)	ERRFCR	CC	H'24',H'80'	
(000089)		DC	S'00',X'0E',H'1',X'00'	
(000090)		DC	X'CC',6X'00'	
(000094)	TXFCR	CC	H'24',H'72'	BYTE AND BIT SIZES
(000100)		DC	AL4(0+4)	
(000201)	ALPHA	DC	AL4(IATBUF)	
(000202)	INTBLF	DC	20X112'00'	INTERRUPT BUFFER
(000203)	INTEND	DC	AL4(0)	END OF STACK
(000310)	TMCCW	DC	AL4(1)MBUF),AL4(24)	
(000317)	SAVE13	DC	3F'0'	
(000345)		DC	AL4(0+4)	
(000348)		DC	AL4(0+4)	
(000355)	SAVE15	DC	3F'0'	
(000360)	NULL	DC	2F'0'	
(000363)	FILLIST	DC	CL8'WBRL5'	
(000364)		DC	CL8'ACF'	
(000365)		DC	CL8'DATA'	
(000366)		DC	CL2'PI'	
(000367)		DC	H'0'	
(000368)		DC	AFILIC)	
(000369)		DC	F'0C'	
(000370)		DC	CL2'F'	
(000371)		DC	H'0'	
(000374)	FILCLT	DC	CL8'LOGD)5'	
(000351)		DC	AL4(0+4)	JW
(000410)		DC	AL4(0+4)	
(000421)		DC	AL4(0+4)	
(000426)	FILE	DC	CL8'WBRL5'	
(000427)		DC	CLP'NCP'	
(000428)		DC	CL8'LOG'	
(000429)		DC	CL2'F'	
(000430)		DC	H'0'	
(000431)		DC	AL4(0+4)	
(000432)		DC	F'0C'	
(000433)		DC	CL2'F'	
(000434)		DC	H'0'	
(000436)	LOGPLF	DC	80C' *	LOGPUS INITIALIZED TO BLANKS JW
(000437)	TOTAP	DC	C'012'456789ABCDEF'	JW

CHART TITLE - CONSTANTS AND STORAGE AREAS

(J00438)	SAVE13	DC	3F'0'	
(0CC451)	PORL	DC	AL4(0)	
(0CC457)	CSN	DS	1F	
(J00458)	PCLLFLC	DC	1F'0'	POLL FLAG
(0CC463)	WTLIST	DC	CL8'WAIT'	WATLIST
(0CC464)		DC	CL4'VCCN',CL4'IMP1',CL4'IMP2'	
(0CC465)		DC	CL4'CCN1'	
(0CC466)		DC	1F'0'	
(0CC467)	INTCEV	DC	1F'0'	
(J00470)	EREF	DC	1F'0'	
(0CC471)	CODE31	DC	CL4' 31 '	
(0CC472)	CODE32	DC	CL4' 32 '	
(0CC473)	CRASH	DC	F'-1'	
(0CC519)	HEAC	DC	AL4(0)	FAC CF LIST

JW

CHART TITLE - 'XFER INTERFACE'

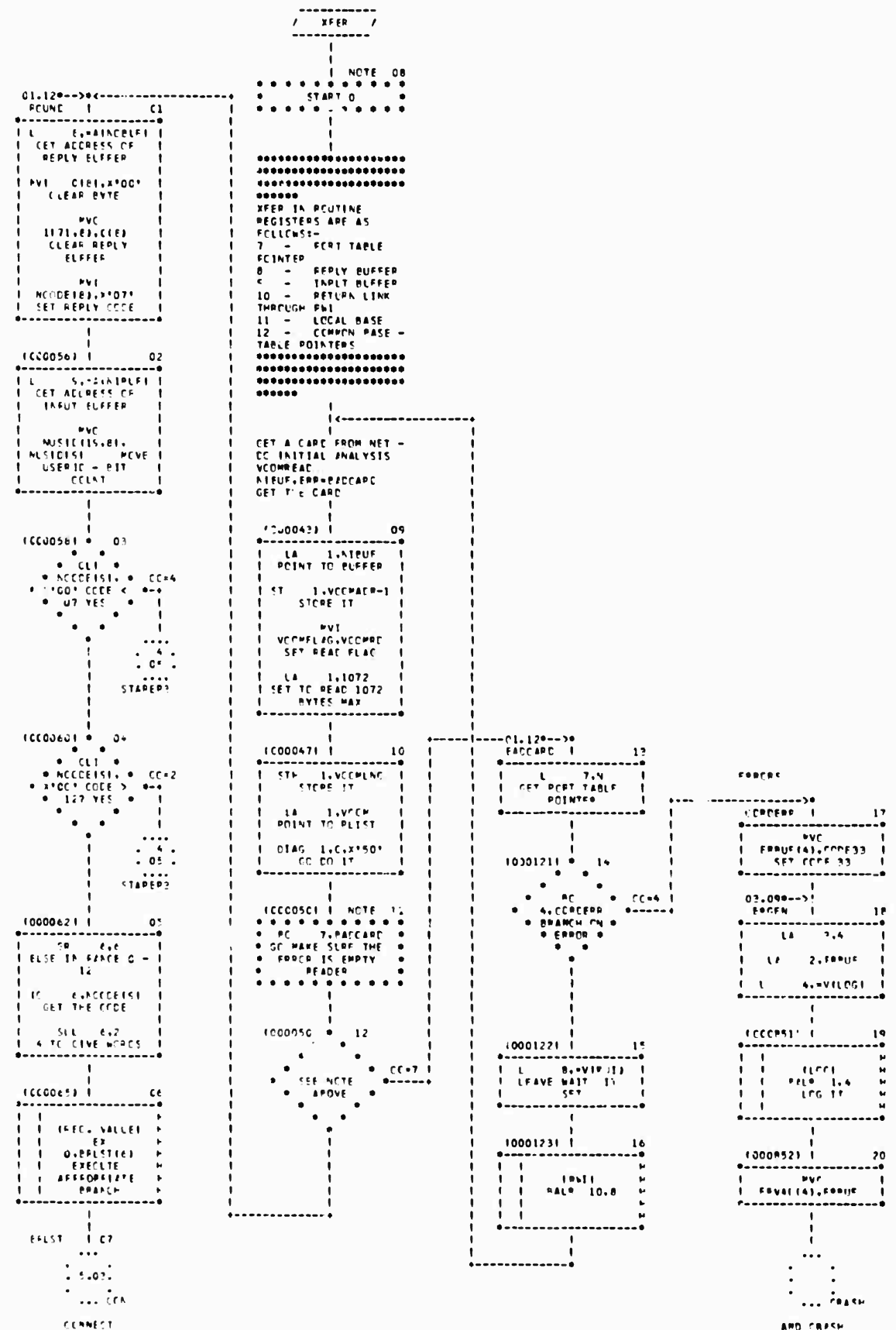


CHART TITLE - 'XFER INTERFACE'

```

-----
/ (000067) /
-----
|
| C1
| ...
| 5-02
| ... LIS
|
LISTEN

```

```

-----
/ (000073) /
-----
|
| O7
| ...
| 4-05
| ... STAREP3
|
REPLY = 777777

```

```

-----
/ (000068) /
-----
|
| C2
| ...
| 14-C1
| ... END
|
SEND

```

```

-----
/ (000074) /
-----
|
| O8
| ...
| 4-05
| ... STAREP3
|
INTERRUPT TO NET = 777777

```

```

-----
/ (000069) /
-----
|
| C3
| ...
| 17-11
| ... PCV
|
RECEIVE

```

```

-----
/ (000075) /
-----
|
| O9
| ...
| 13-01
| ... END
|
ENABLE CONNECT

```

```

-----
/ (00007C) /
-----
|
| C4
| ...
| 20-C6
| ... CLE
|
CLOSE

```

```

-----
/ (000076) /
-----
|
| 10
| ...
| 13-12
| ... ENL
|
ENABLE LISTEN

```

```

-----
/ (000071) /
-----
|
| C5
| ...
| 23-01
| ... STA
|
STATUS

```

```

-----
/ (000077) /
-----
|
| 11
| ...
| 13-14
| ... CSP
|
DISABLE

```

```

-----
/ (000072) /
-----
|
| C6
| ...
| 14-C7
| ... SACA
|
INTERRUPT - TEST CHECK
LOCAL TAG

```

```

-----
/ (000078) /
-----
|
| 12
| ...
| 20-01
| ... C10
|
PIRPE

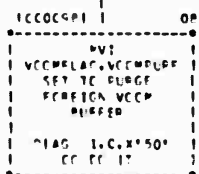
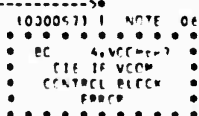
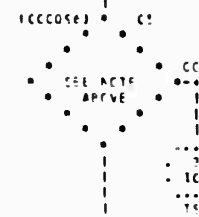
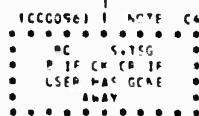
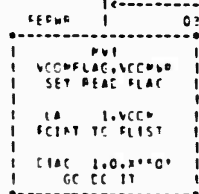
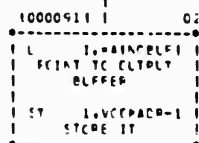
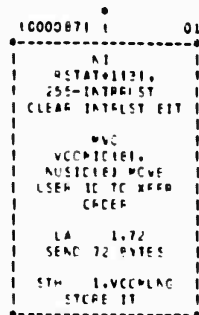
```

CHART TITLE - 'XFER INTERFACE'

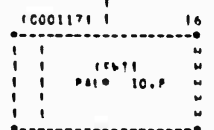
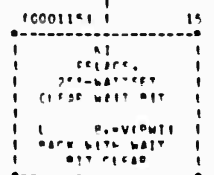
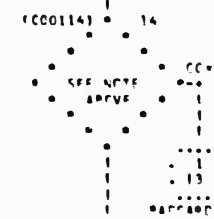
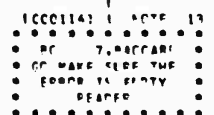
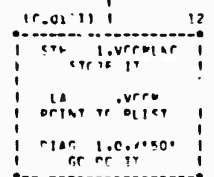
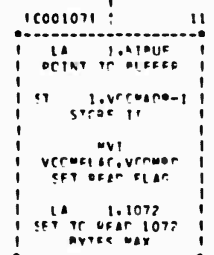
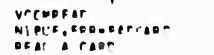
SEND THE DEFLY

64,620--70

VCCMSENC
ACPLF SEND THE
REPLY CARD



AND THERE THEY STAY



APR 15 6 52 PM '68

CHART TITLE - 'XFER INTERFACE'

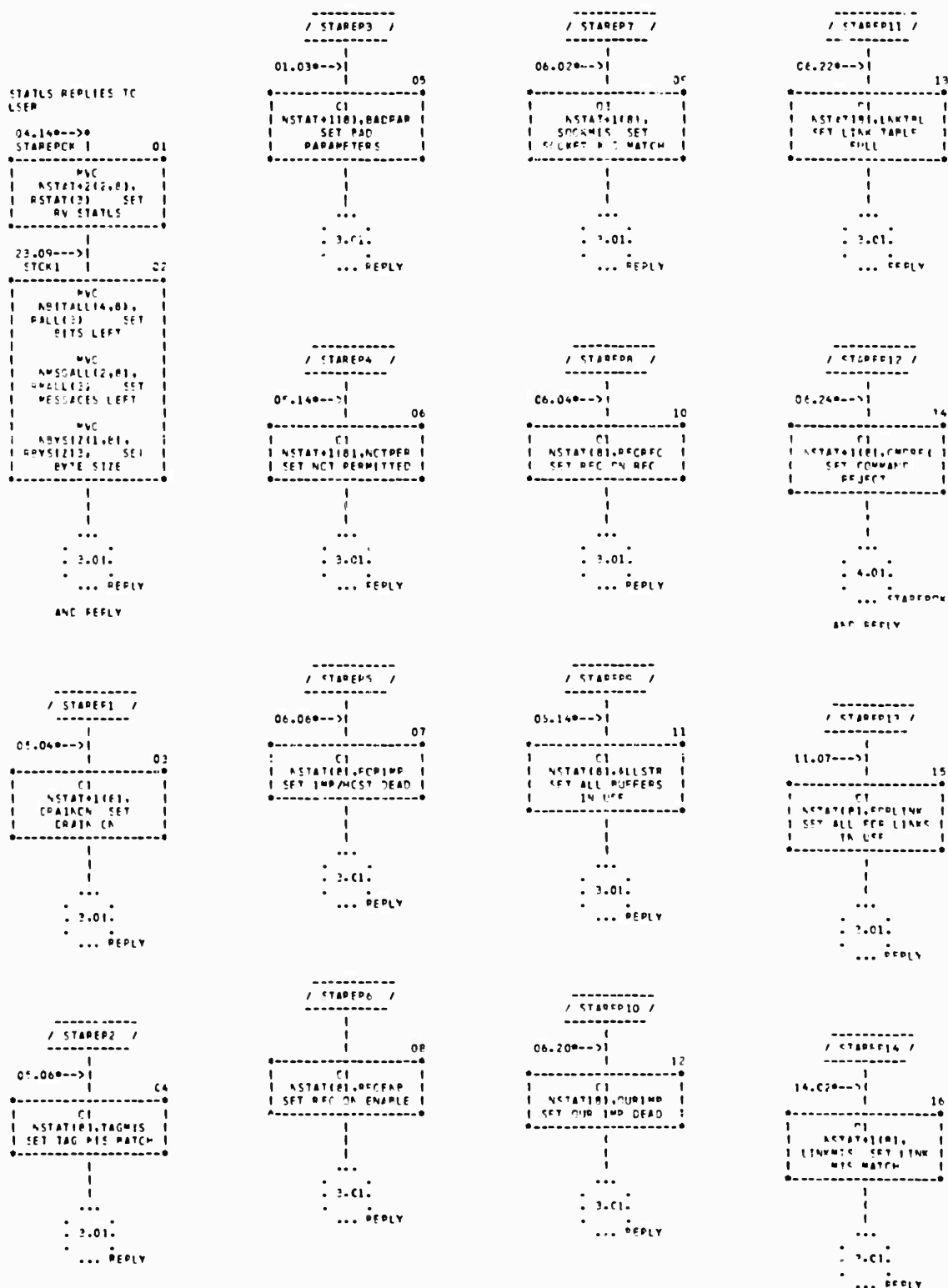
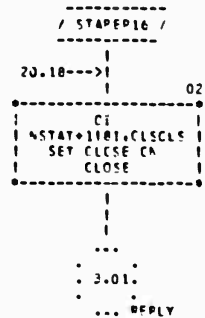
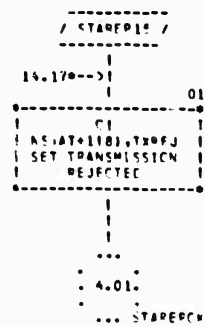


CHART TITLE - XFER INTERFACE



```

    ITS A CONNECT
    01.07-->|
    |
    |----- 03
    |
    | C1
    | SYS:AT+1101,TRPFJ
    | SET TRANSMISSION
    | REJECTEC
    |
    |
    | ...
    | 4.01.
    | ... STAREP15
  
```

```

    10001701 04
    |
    | SEE NOTE
    | ABOVE
    |
    |
    | ...
    | 4.01.
    | ... STAREP15
  
```

```

    10001721 NOTE 05
    |
    | C1
    | SYS:AT+1101,TRPFJ
    | SET TRANSMISSION
    | REJECTEC
    |
    |
    | ...
    | 4.01.
    | ... STAREP15
  
```

```

    10001721 06
    |
    | SEE NOTE
    | ABOVE
    |
    |
    | ...
    | 4.01.
    | ... STAREP15
  
```

```

    10001741 NOTE 07
    |
    | C1
    | SYS:AT+1101,TRPFJ
    | SET TRANSMISSION
    | REJECTEC
    |
    |
    | ...
    | 4.01.
    | ... STAREP15
  
```

```

    10001741 08
    |
    | SEE NOTE
    | ABOVE
    |
    |
    | ...
    | 4.01.
    | ... STAREP15
  
```

```

    10001761 NOTE 09
    |
    | C1
    | SYS:AT+1101,TRPFJ
    | SET TRANSMISSION
    | REJECTEC
    |
    |
    | ...
    | 4.01.
    | ... STAREP15
  
```

```

    10001761 10
    |
    | SEE NOTE
    | ABOVE
    |
    |
    | ...
    | 4.01.
    | ... STAREP15
  
```

```

    10001781 11
    |
    | C1
    | SYS:AT+1101,TRPFJ
    | SET TRANSMISSION
    | REJECTEC
    |
    |
    | ...
    | 4.01.
    | ... STAREP15
  
```

```

    10001801 12
    |
    | C1
    | SYS:AT+1101,TRPFJ
    | SET TRANSMISSION
    | REJECTEC
    |
    |
    | ...
    | 4.01.
    | ... STAREP15
  
```

```

    10001811 13
    |
    | C1
    | SYS:AT+1101,TRPFJ
    | SET TRANSMISSION
    | REJECTEC
    |
    |
    | ...
    | 4.01.
    | ... STAREP15
  
```

```

    10001821 14
    |
    | C1
    | SYS:AT+1101,TRPFJ
    | SET TRANSMISSION
    | REJECTEC
    |
    |
    | ...
    | 4.01.
    | ... STAREP15
  
```

```

    10001821 15
    |
    | C1
    | SYS:AT+1101,TRPFJ
    | SET TRANSMISSION
    | REJECTEC
    |
    |
    | ...
    | 4.01.
    | ... STAREP15
  
```


CHART TITLE - 'XFER INTERFACE'

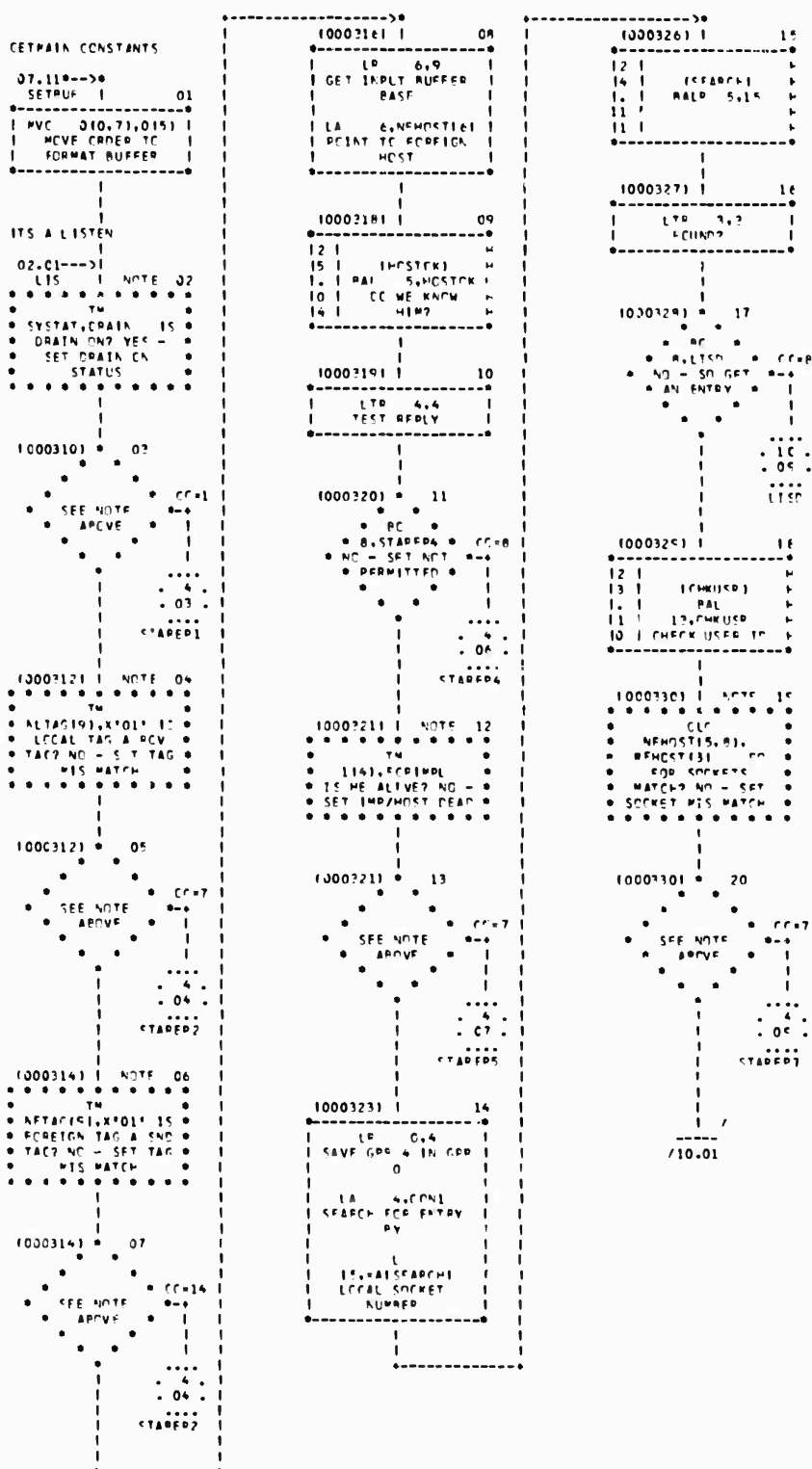


CHART TITLE - 'XFER INTERFACE'

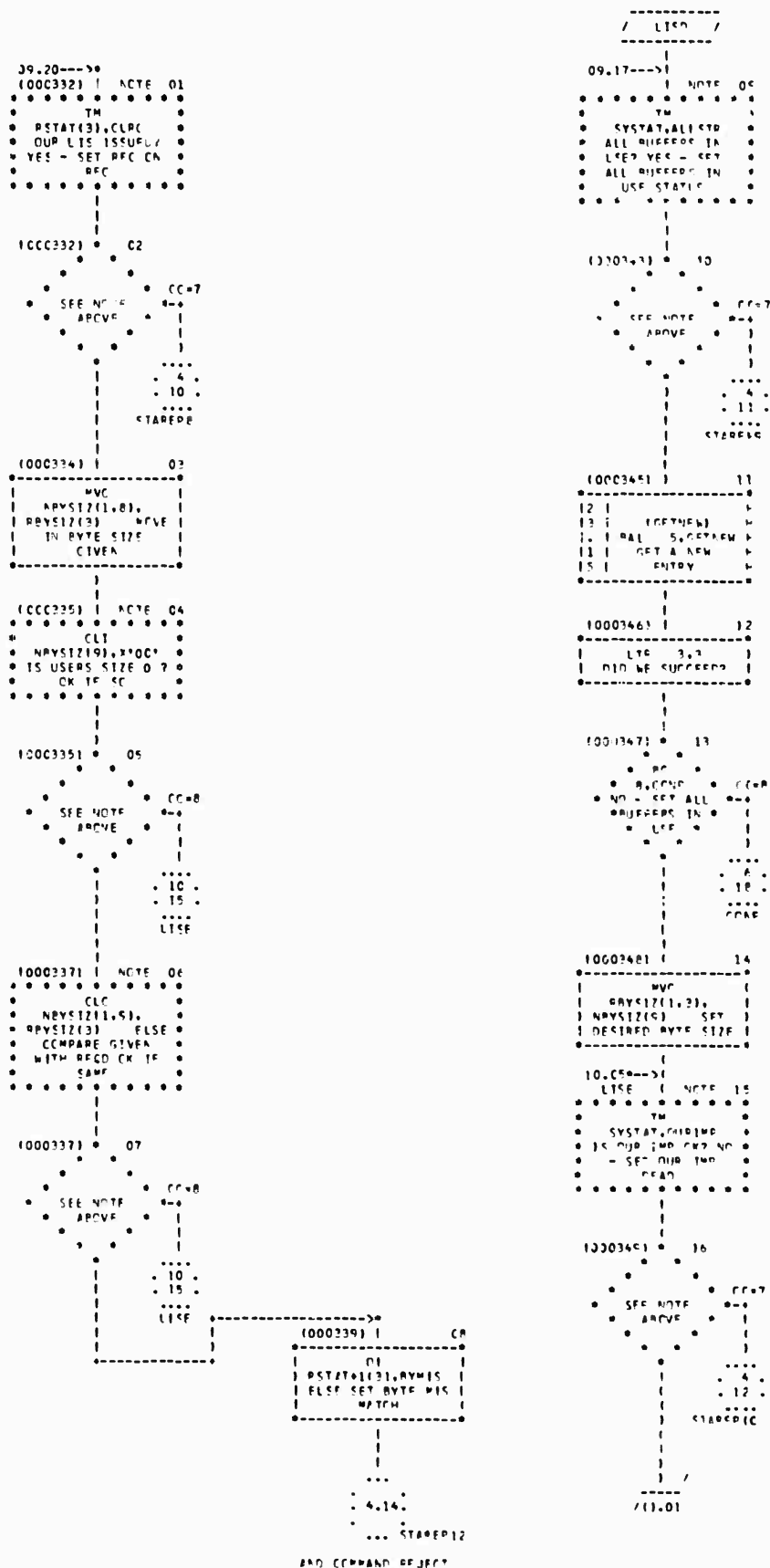


CHART TITLE - 'XFER INTERFACE'

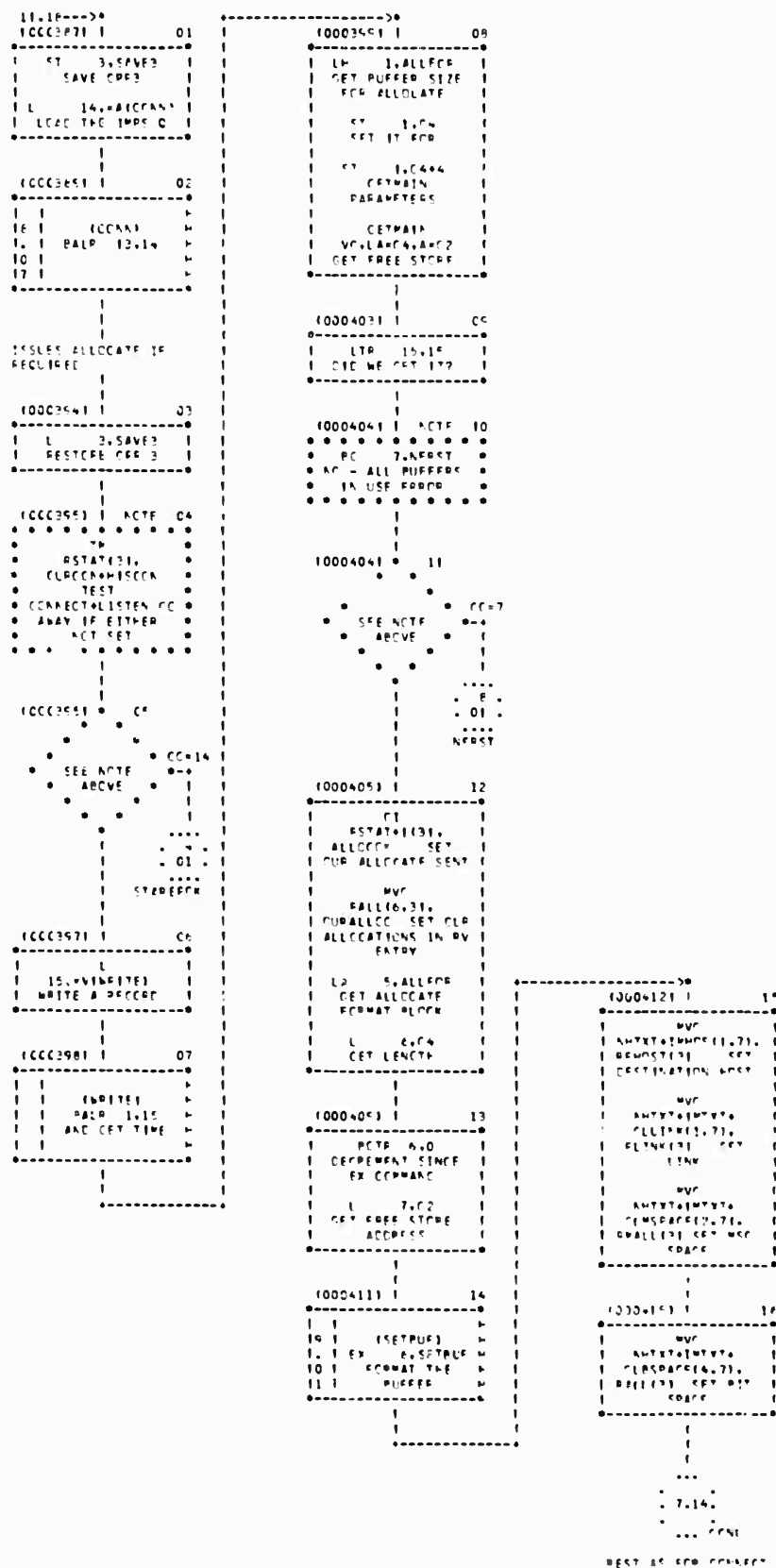


CHART TITLE - 'DEFR INTERFACE'

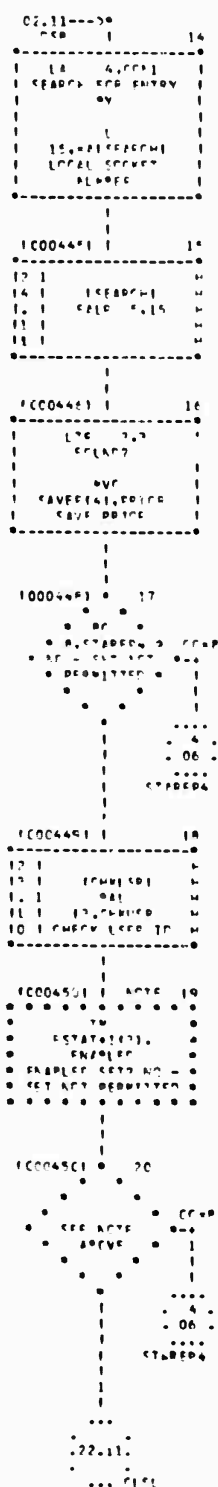
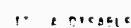
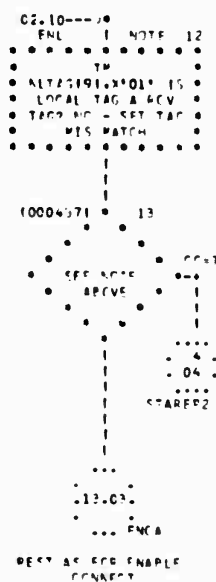
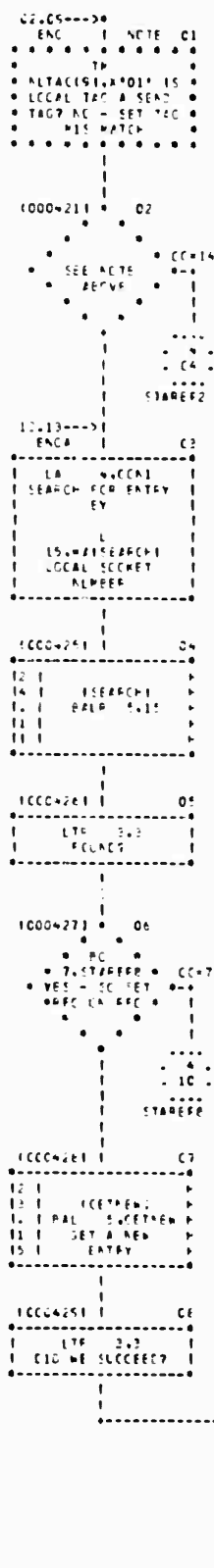


CHART TITLE - XFER INTERFACE

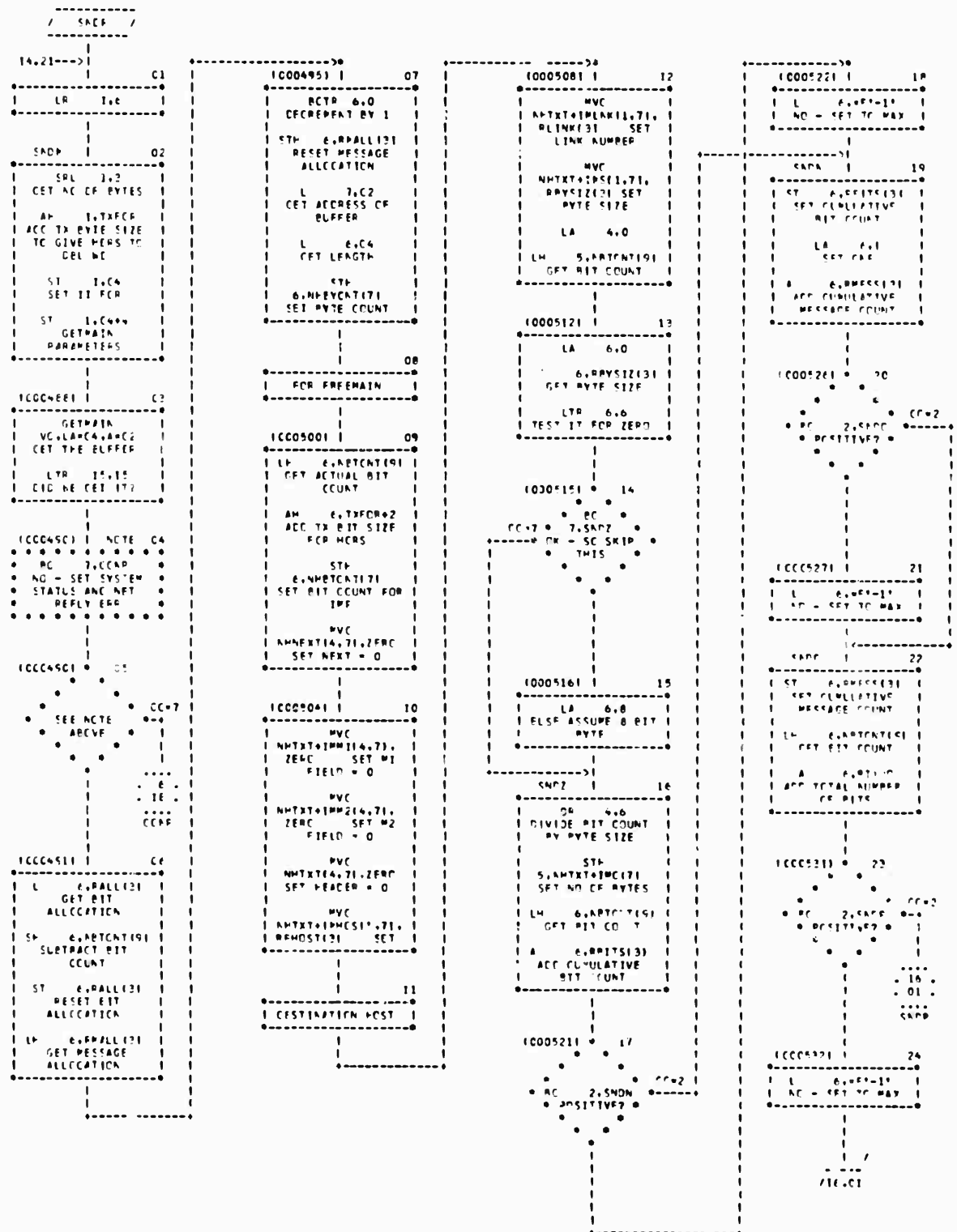


CHART TITLE - 'XFER INTERFACE'

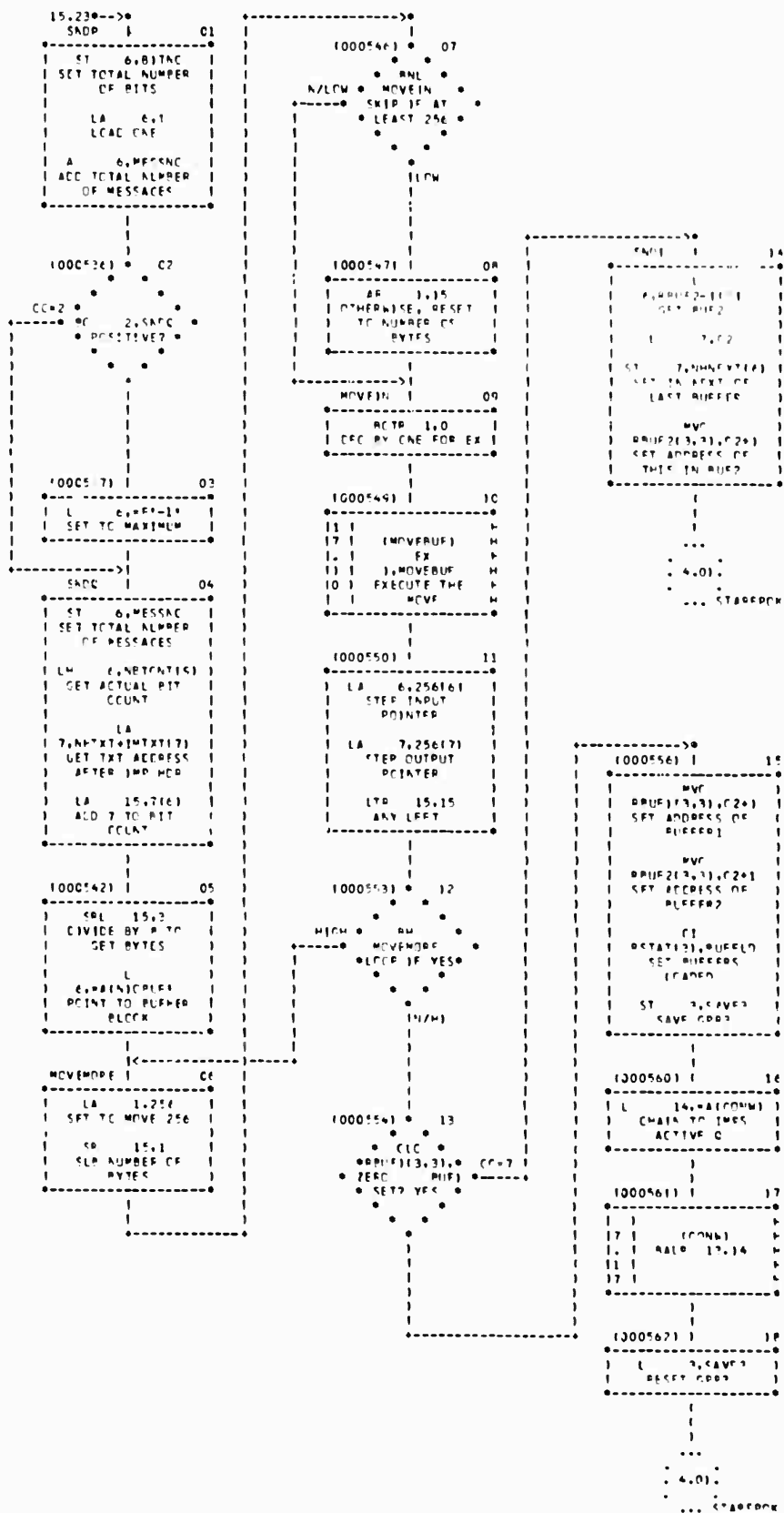


CHART TITLE - 'XFER INTERFACE'

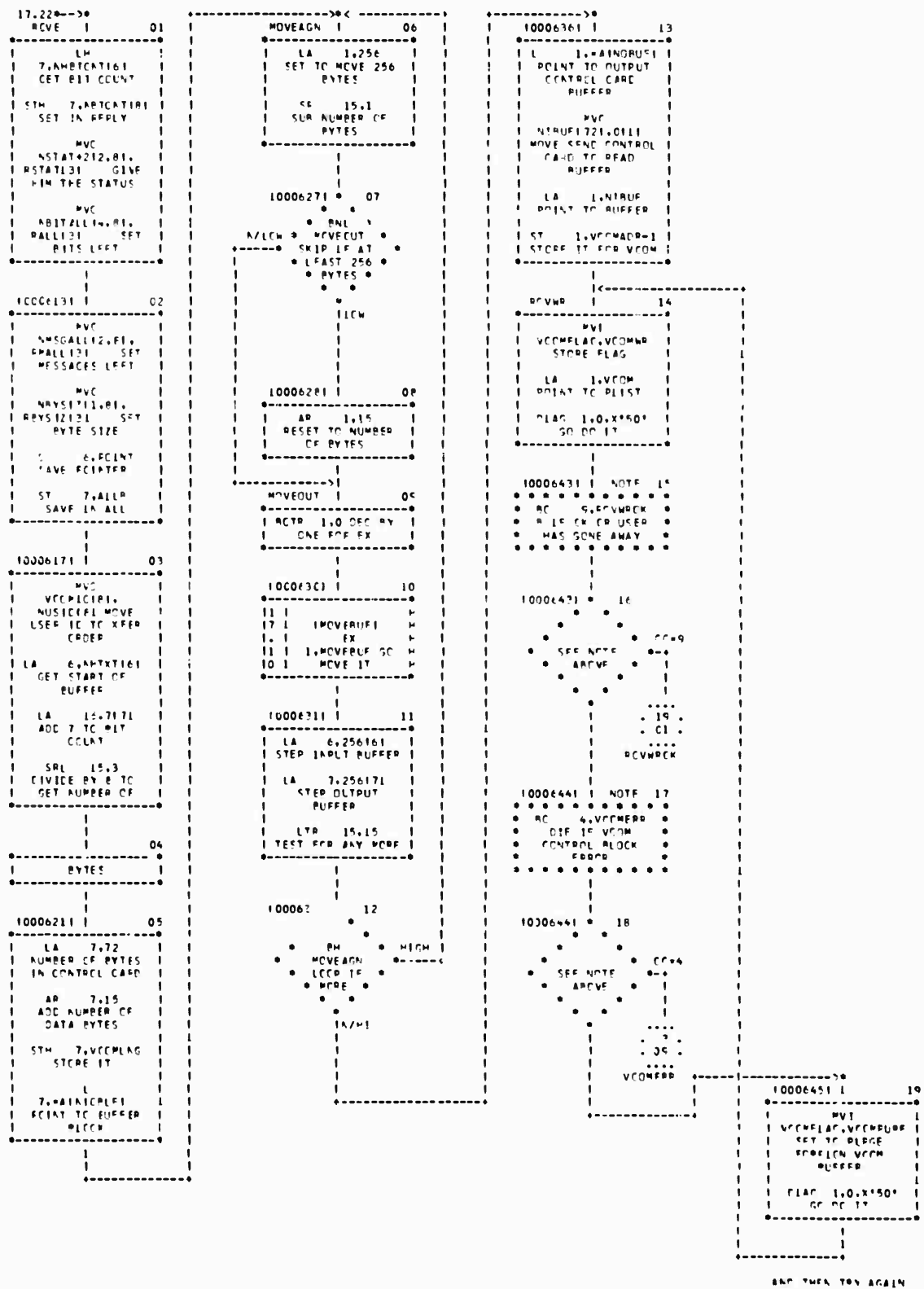


CHART TITLE - 'XFER INTERFACE'

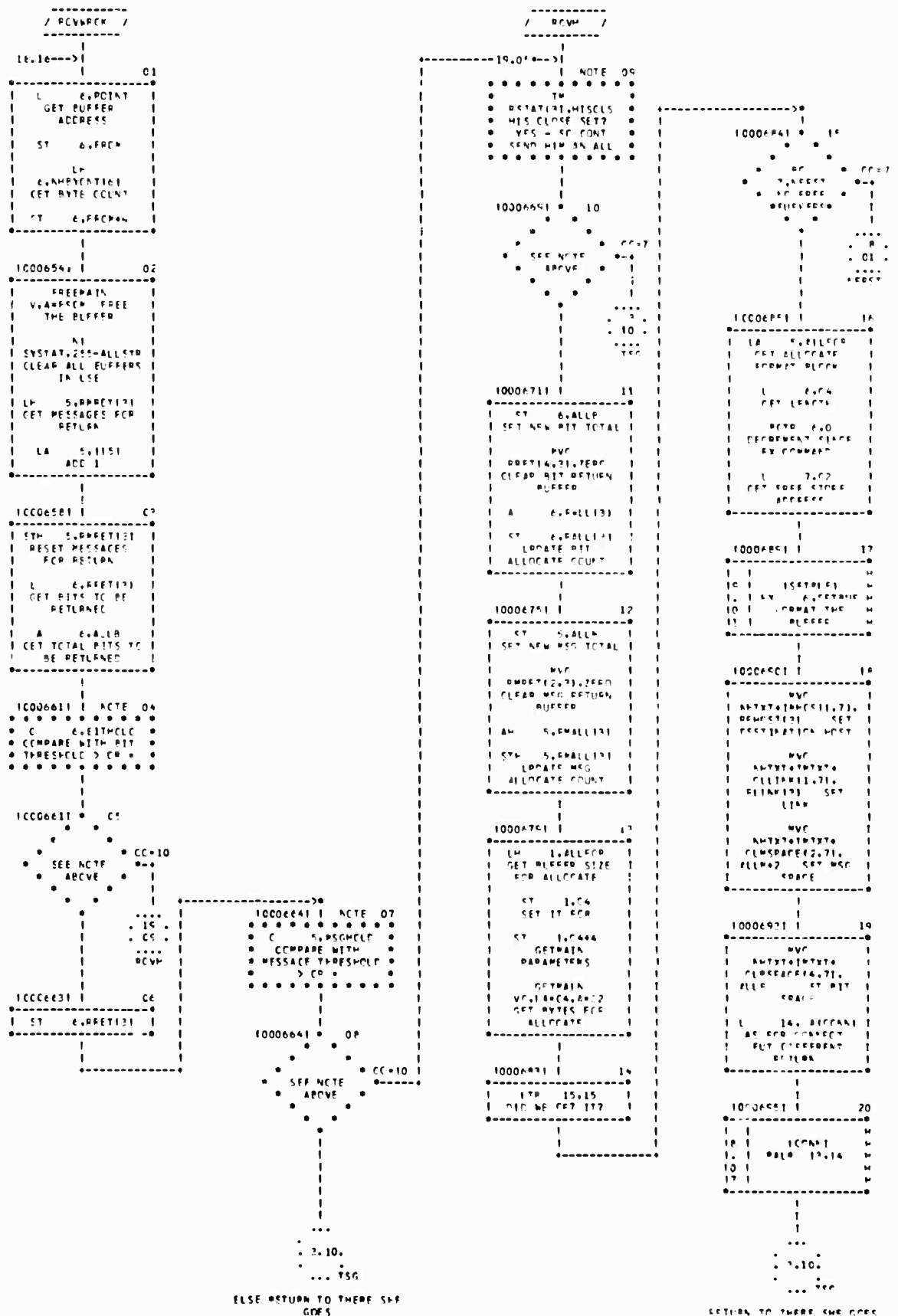


CHART TITLE - 'XFER INTERFACE'

ITS A PURGE

02.12-->0
PUR 1 01

LA	4,CCN1
SEARCH FOR ENTRY	BY
L	
15,=A1SEARCH1	
LOCAL SOCKET	
NUMBER	

(CCC711) 02

12	1	1SEARCH1
14	1	PAID 5,15
11	1	
11	1	

(CCC712) 03

LTR	3,3
FOUND?	

(CCC713) 04

EC	
8,STAREF4	CC=8
AC - SET NOT	
PERMITTED	

(CCC714) 05

SAVED14,PRTER	
SAVE PRTER	

(CCC715) 06

12	1	1CHNLSR1
13	1	PAID
11	1	13,CHNLSR
10	1	CHECK USER ID

10007161 1 NOTE 07

TM	
8,STAT131	
CURCCN+CURCLS	
FOR CCNCT AND	
CLOSE ISSUED?	
RTM - SC PURGE	
IT VIA CLOSE	

10007161 0P

SEE NOTE	CC=1
ABOVE	

21	
17	
PIRCE	

4,14	
STAREF12	

ELSE SET COMMAND REJECTED

ITS A CLOSE

02.04-->0
CLS 1 00

LA	4,CCN1
SEARCH FOR ENTRY	BY
L	
14,=A1SEARCH1	
LOCAL SOCKET	
NUMBER	

10007251 10

12	1	1SEARCH1
14	1	PAID 5,15
11	1	
11	1	

10007261 11

LTR	3,3
FOUND?	

10007271 12

EC	
8,STAREF4	CC=8
AC - SET NOT	
PERMITTED	

10007281 13

SAVED14,PRTER	
SAVE PRTER	

10007291 14

12	1	1CHNLSR1
13	1	PAID
11	1	13,CHNLSR
10	1	CHECK USER ID

10007301 15

TM	
8,STAT131	
CURCLS+ISCLS	
EITHER CLOSE	
ISSUED? RTM - SC	
REMOVE ENTRY	

10007301 16

SEE NOTE	CC=1
ABOVE	

21	
17	
PIRCE	

10007311 17

TM	
8,STAT131	
CURCLS+ISCLS	
EITHER CLOSE	
ISSUED? RTM - SC	
REMOVE ENTRY	

10007321 18

SEE NOTE	CC=7
ABOVE	

10007331 19

21	
17	
PIRCE	

10007341 20

TM	
8,STAT131	
CURCCN+ISCLS	
CONNECT TO 13131N	
ISSUED? RTM - SC	
REMOVE ENTRY	

10007341 21

SEE NOTE	CC=8
ABOVE	

10007351 22

SAVED14,PRTER	
SAVE PRTER	

10007361 23

LA	1,CLNPR
SET ALBERE 5,15	
FOR CLNPR	
ST	1,CLN
SET IT FOR	
ST	1,CLN44
RTM131	
RTM131	
RTM131	

10007361 24

LA	1,CLNPR
SET ALBERE 5,15	
FOR CLNPR	

10007361 25

LTR	15,15
FOUND?	

10007361 26

SEE NOTE	CC=1
ABOVE	

21	
17	
PIRCE	

CHART TITLE - 'XFER INTERFACE'

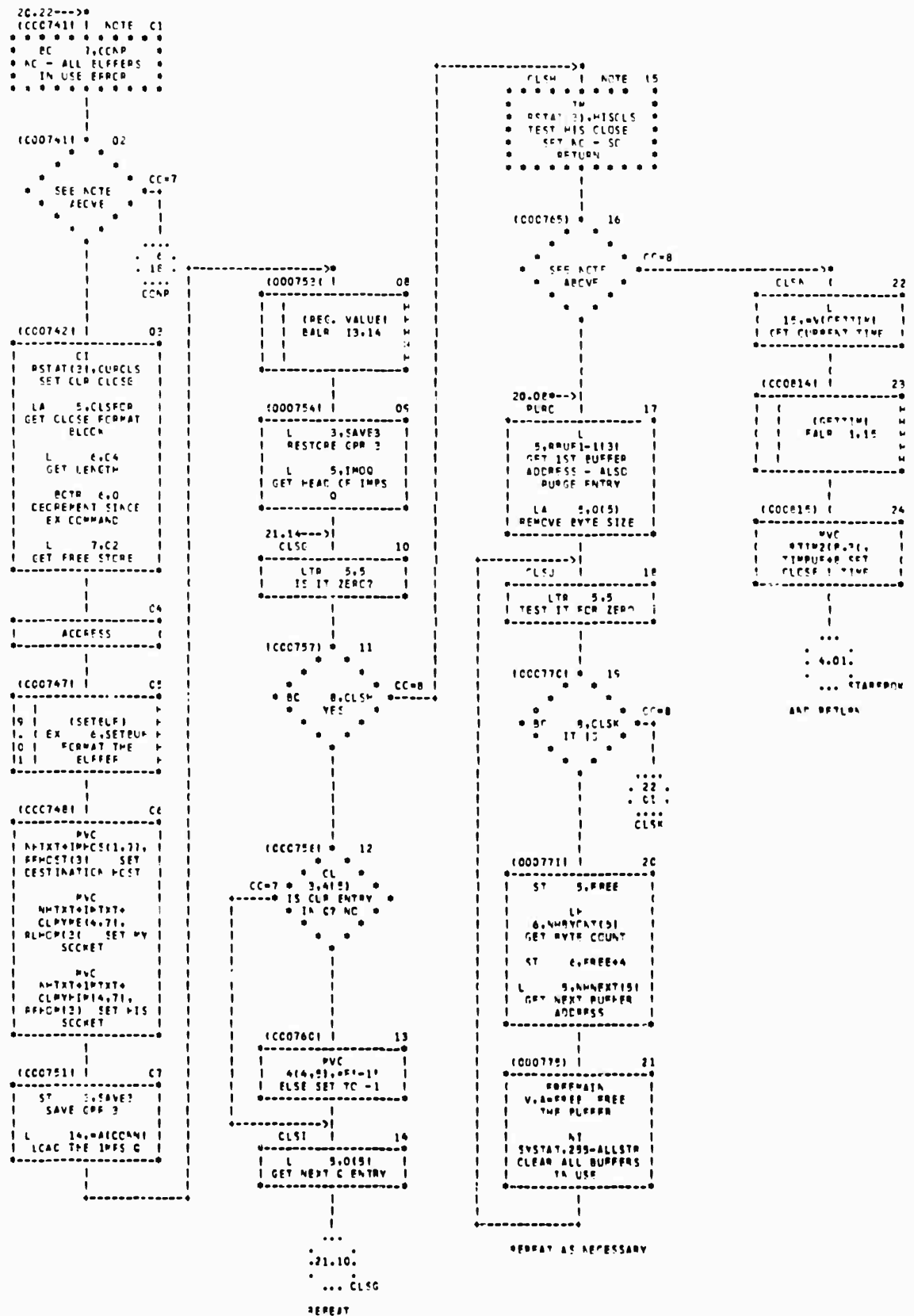


CHART TITLE - 'XFER INTERFACE'

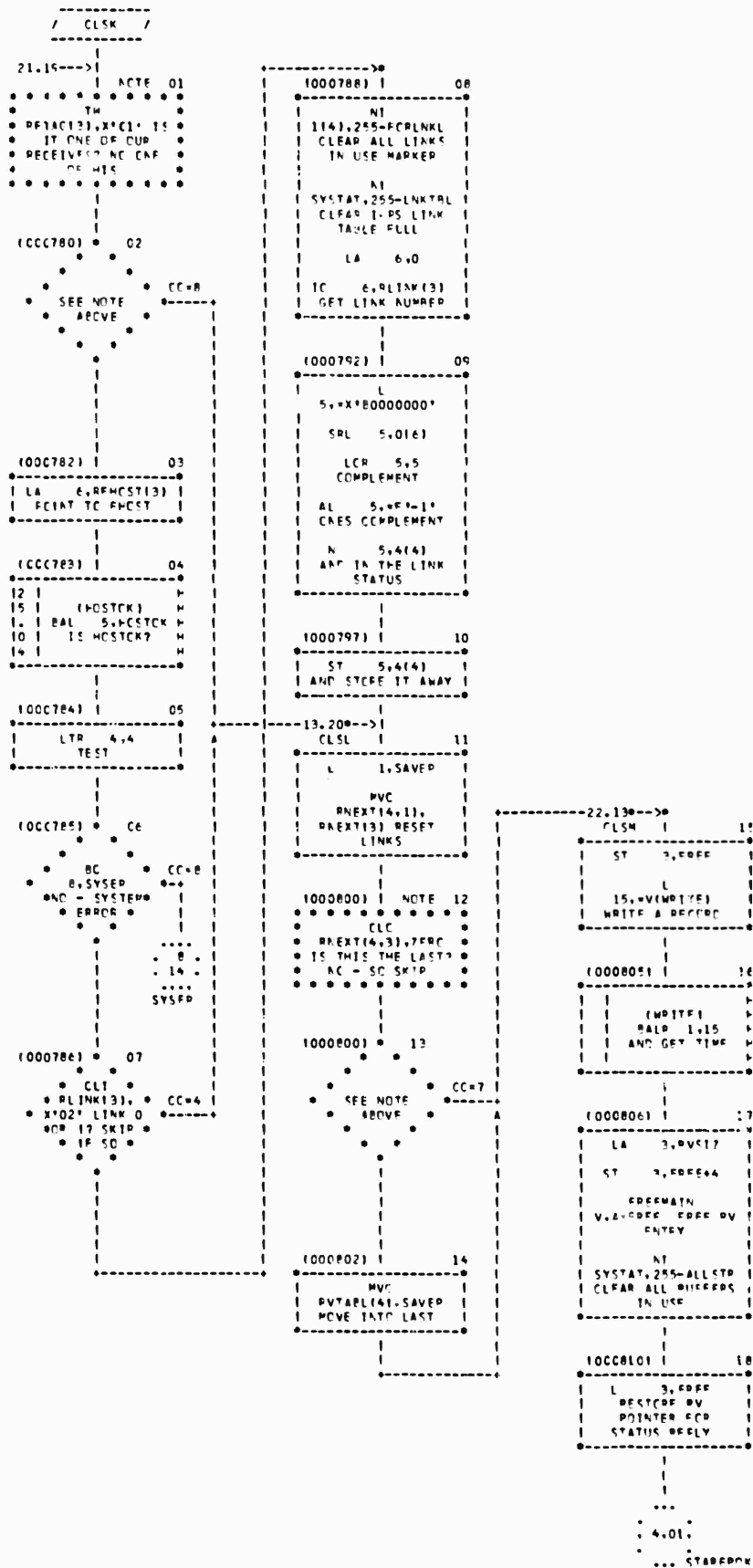
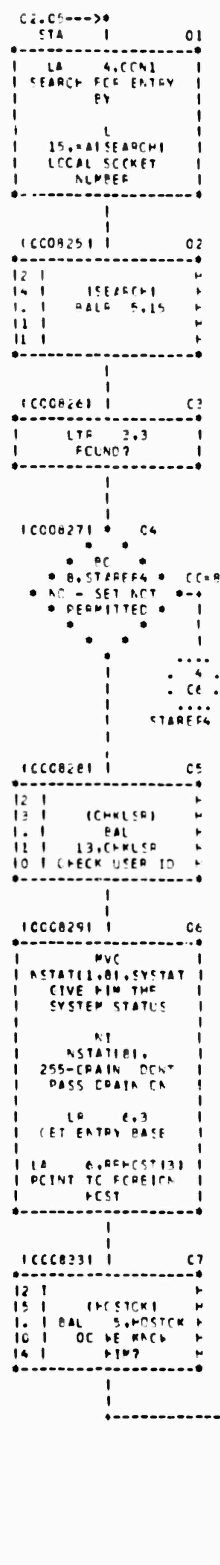


CHART TITLE - 'XPER INTERFACE'



THATS ALL FOLKS

```
*****  
*****  
*****  
*****  
*****  
  
ROUTINE TO CHECK THE  
USER IN  
REGISTERS ARE AS  
FOLLOWS:-  
  
R    - REPLY BUFFER  
G    - INPUT BUFFER  
II   - LOCAL BASE ADDRESS  
REFPOF  
  
I2   - COMMON BASE  
I3   - LINK REGISTER  
  
*****  
*****  
*****
```

```

06.11.9-->
CHANGED 1 NOTE TO
* * * * *
*      CLR      *
*  PHYSICIA, 31, *
* MUSTI 91 USER IDS
* AGREE? ACP  F, 3
*  YES - RETURN
* * * * *

```

[illegible]

```

1000F801 | NOTE 12
* * * * *
*      CLC      *
*      RUSTIER.31. *
*      DEATHROW UNKNOWN? *
*      NC - SET NOT *
*      PERMITTED *
* * * * *

```

1000PRO1 13

SEE NOTE
ABOVE

CC=

OF

STAPED4

[illegible]

DET:ION 02 13

CONSTANTIC

[illegible]

```

06.150-->0
CEPAB 1 15
-----
| CEPAB |
| W, LAT, A, FORM |
| SET FREE STORAGE |
|
| LTR 15.15 |
| CIP W5 CEP 177 |
|
| LP 2.0 |

```

Diagram illustrating the internal wiring of a 7-segment display. The segments are labeled with their corresponding pins: 1 (top), 2 (top-right), 3 (bottom-right), 4 (bottom), 5 (bottom-left), 6 (top-left), and 7 (middle). The wiring is as follows: Pin 1 connects to segment 1. Pin 2 connects to segment 2. Pin 3 connects to segment 3. Pin 4 connects to segment 4. Pin 5 connects to segment 5. Pin 6 connects to segment 6. Pin 7 connects to segment 7. The diagram also shows the connections for the common anode (pin 14) and common cathode (pin 12) configurations.

```

(CCCCC) 1 17
-----
L 3,0000
CODE SPACE
ADDRESS

MVS
D=01117,31,
ALTIM131 MVS
TA 00000 - 5740

MVS
D111171,X1000
C111171 111171

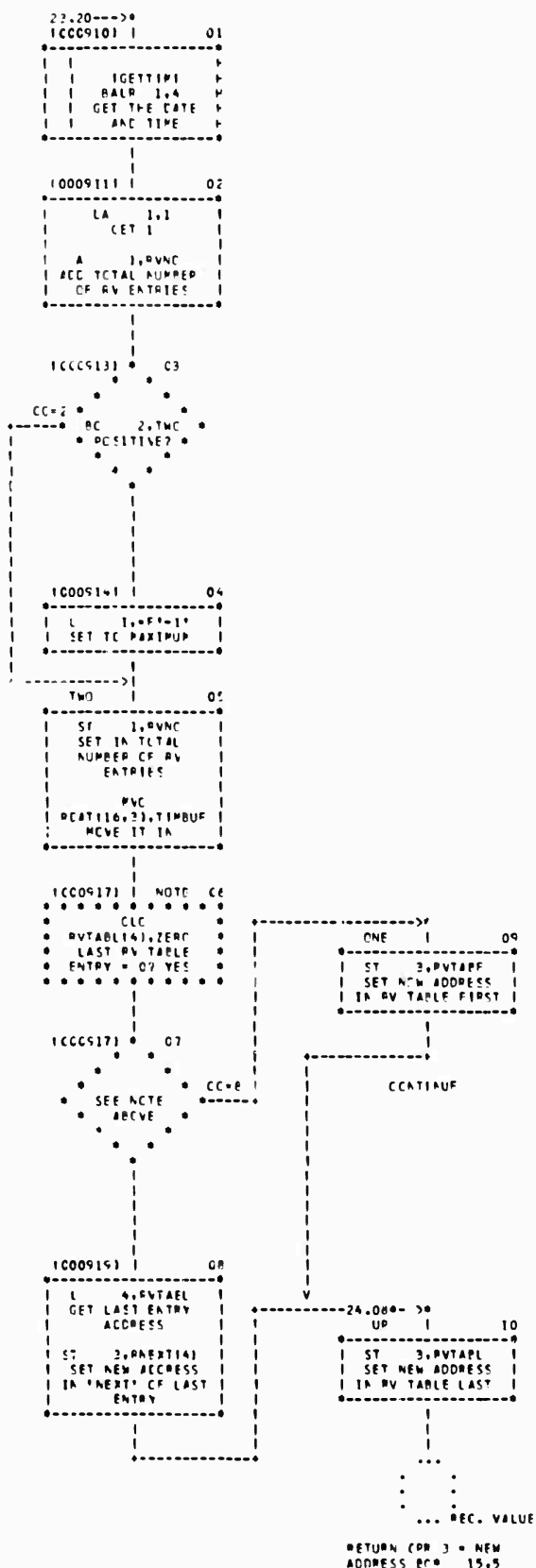
MVS
D111171,011171-11,31
C111171
C111171 011171

```

1	CCCCC	1	10
1		1	
1	4,000,000	1	

124.C1

CHART TITLE - 'XFER INTERFACE'



GET CONSTANTS

SEARCH ROUTINE
SEARCHES THE
DEPENDENT TABLE FOR
A SPECIFIED FIELD
MATCH. IF FOUND THE
ENTRY ADDRESS IS
GIVEN IN CDR3.
CDR5 IS THE LINK FROM
THE CALLER AND CDR4
WAST
INITIALLY POINT TO
THE COMPARISON ORDER
THAT IS TO
BE EXECUTED. THE
COMPARISON ORDER IS
OF THE FORM:-
CLC
ALPHA,BETA,31,
COMPRYTES
WHERE ALPHA IS THE
DISPLACEMENT OF THE
ENTRY, BETA
IS THE LENGTH TO BE
COMPARED AND
COMPRYTES IS A STRING
OF BYTES AGAINST
WHICH THE ENTRY IS TO
BE COMPARED.
CDR15 IS THE
ADDRESSING REGISTER.

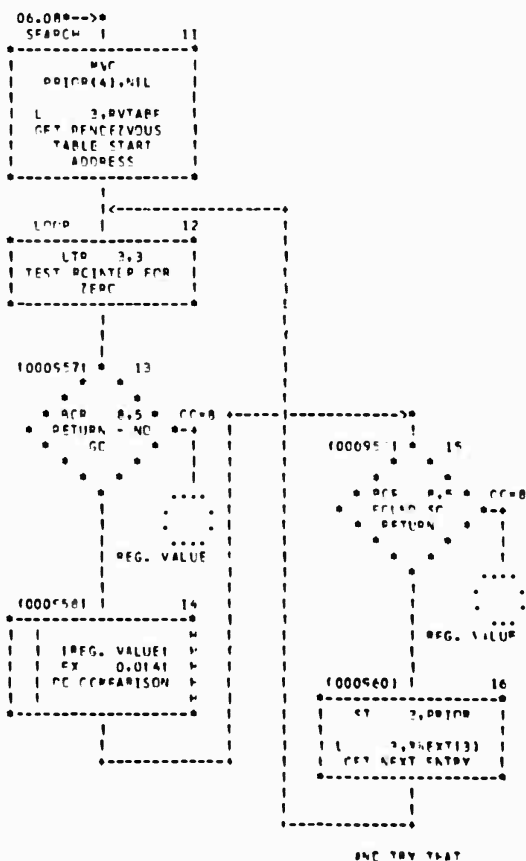


CHART TITLE - XFER INTERFACE

EXECUTE INSTRUCTIONS

```

CCN1 1  NOTE 01
•••••
• CLC
• RHEP14,31,
• ALHOMISI COMPARE
• LOCAL SECRET
• ALPHBFS
•••••

```

10009661 02

```

•••••
• SEE ACTS
• SECVE
•••••

```

CCN2 03

```

•••••
• CLC
• RFHCST18,31,
• LKQENT
•••••

```

```

•••••
• FIND FOREIGN HOST
• ROUTINE
• REGISTERS USED ARE:-
• 4 - FCINTER TO
• RESULT,AL FOREIGN
• CST LINK TABLE
• 5 - LINK REGISTER
• 6 - FCINTER TO
• FCST COMPARISON
•••••

```

```

05.120-->
PCSTCK C4
L 4,LSSTAT

```

```

-25.04-->
REP 1  NOTE 05
•••••
• CLC 011,41,0151
• COMPARE FOREIGN
• FCST WITH KNCWA
• PCR 8,5
• EQUAL SO RETURN
•••••

```

10005851 06

```

•••••
• SEE NOTE
• ABOVE
•••••

```

```

10005511 07
LA 4,LSIZ141
STEP TABLE
CELL-TER

```

10005921 08

```

CC=4 4,LSLEND
END CF TABLE?
BNC - REPEAT

```

```

10005541 09
PC 4,4
SET FOR 4 = 0

```

```

•••••
• VALLE
•••••

```

SETS THE ARTIFICIAL
LINK 0 PATRIOS FOR
ALL KNOWN HOSTS

```

SETUP 1 10
L 11,RTXFINI 1
10010341 11
LA 9,SECCG
L 8,LSSTAT

```

```

CNCN 12
•••••
• CL
• 8,LSLEND
• PCR 8,10
• FINISHED
•••••

```

```

10010081 13
MVC
SECCG,FMHCST111,
0161 SET FMHCST

```

```

10010051 14
12 1 (GETNEW)
11 1 PAR 5,CETNEW
15 1

```

```

10010101 15
LTO 3,3
DIO NE GET 179

```

```

10010111 16
PC
8,NEFST
PC - NC FREE
STORE

```

```

10010121 17
PVI
RTXFINI,RTX301
SET LINK 0
PVI
RTXFINI,RTX301
SET RTX TIME AS
LA 4,LSIZ161
CONTINUE

```

/ 1010301 /

```

1 18
VFFB

```

```

10010421 19
ECCNFC
RTX

```

```

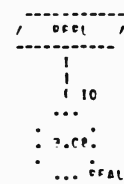
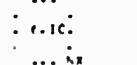
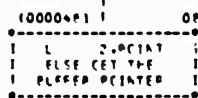
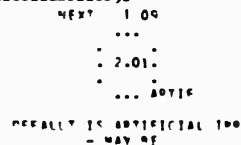
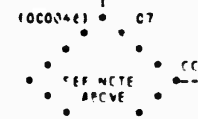
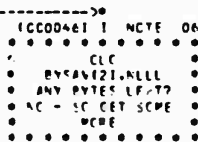
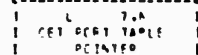
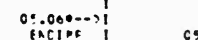
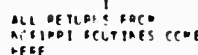
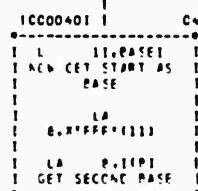
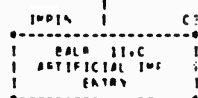
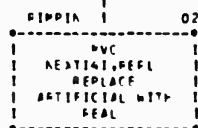
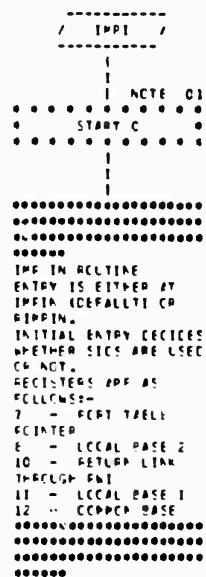
10010441 20
XTP
YOTE

```


CHART TITLE - CONSTANTS AND STORAGE AREAS

1000255)	C2	CC	1F*0*	
1000300)	C3	CC	2F*0*	
1000301)	C4	CC	2F*0*	
1000302)	SAVE3	CC	1F*0*	
1000303)	CHRALLOC	CC	1F*32000*,H*100*	
1000304)	ALL*	CC	1F*0*	
1000701)	POINT	CC	1F*0*	
1000702)	PRCP	CC	2F*0*	
1000703)	PTHCLD	CC	1F*1000*	BIT THRESHOLD
1000704)	MSGHCLD	CC	1F*100*	MESSAGE THRESHOLD
1000818)	FREE	CC	10*0*	
1000867)	CONTRACB	CC	CL8*77777777*	
1000925)	TC	CC	2AL4IRV512)	SIZE OF ENTRY
1000930)	ZERC	CC	1F*0*	ZERC SOURCE
1000968)	LARGENT	CC	1F*0*	
1000969)		CC	1F*0*	
1000970)	PRICB	CC	1F*0*	
1000971)	AIL	CC	1F*0*	
1001017)	SPECS	CC	XL1*00*	CODE
1001018)		CC	CL8*000*	USER ID
1001019)		CC	21X*00*	REST
1001020)		CC	X*00*	BYTE SIZE
1001021)	SAVEF	CC	1F*0*	
1001022)	CCC	CC	XL8*FFFFFFFFFFFFFFFF*	
1001023)	CRASH	CC	1F*-1*	
1001024)	EMBLF	CC	1F*0*	
1001025)	CCCE33	CC	CL4* 33 *	
1001026)	CCCE34	CC	CL4* 34 *	
1001027)	CCCE35	CC	CL4* 35 *	
1001028)	CCCE36	CC	CL4* 36 *	
1001038)	NOBUF	CC	18F*0*	NET OUTPUT BUFFER
1001039)	NOBUF	CC	18F*0*	NET INPUT BUFFER
1001040)	NOBUF	CC	256F*0*	SPACE FOR I/O BUFFER

CHART TITLE - 'IMP INPUT INTERFACE'



DECLARED BY THIS - DEAL
THE BOARD

CHART TITLE - 'IMP INPLY INTERFACE'

ARTIFICIAL IMP
ROUTINE

CHART TITLE - 'IMP INPUT INTERFACE'

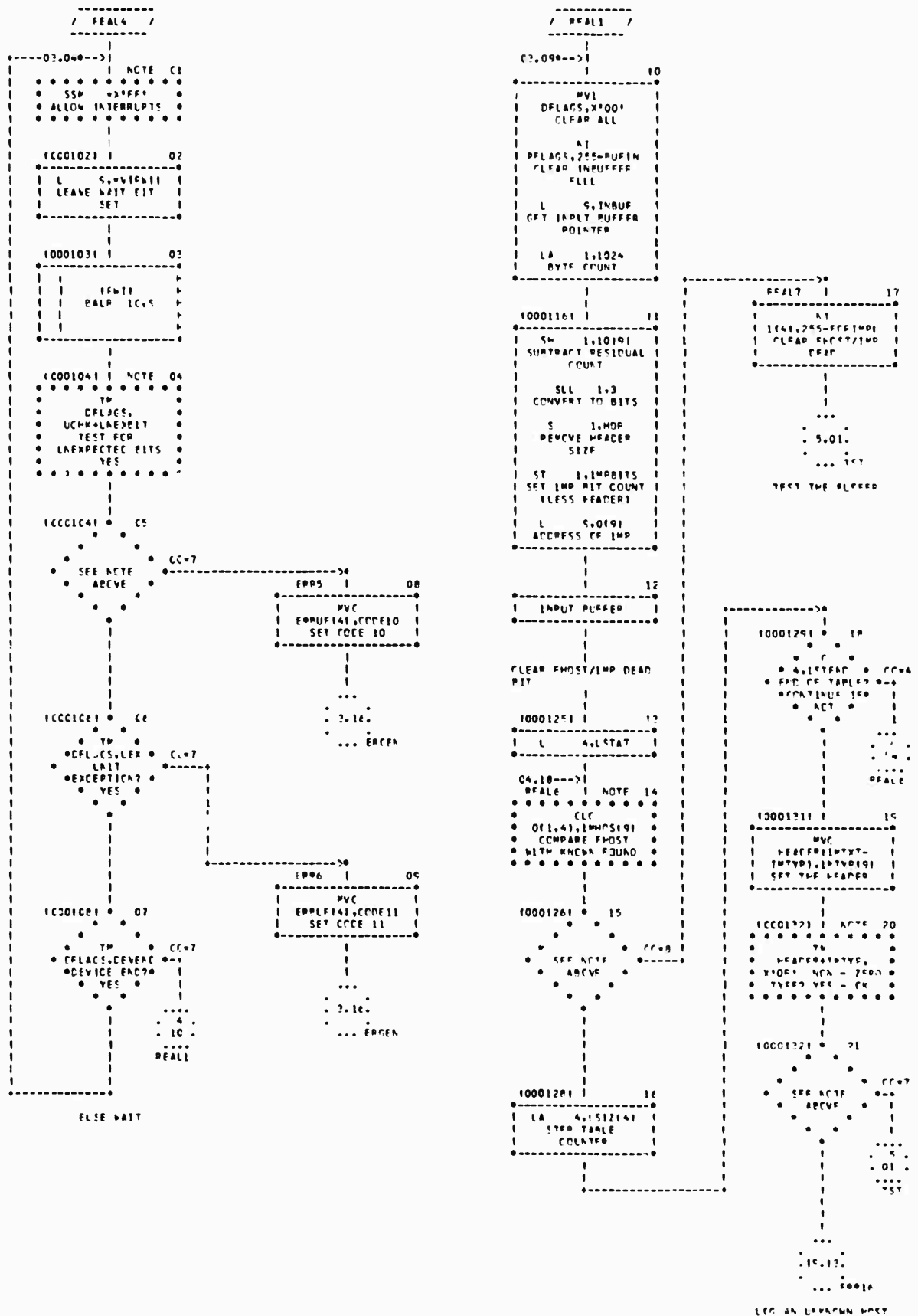


CHART TITLE - 'IMP INPLY INTERFACE'

TEST BUFFER FOR TYPE
OF MESSAGE AND LENGTHC2,CS0-->0
TST 1 01

L2	2,5
CET ADDRESS OF BUFFER	
MVC HEADER(1,XT- 1,MTYP),1,MTYP(2) SET THE HEADER	

ICCC144	ACTF	02
YH		
HEADER+1,MTYP, X'DF' NON - ZERO TYPE? YES		

ICCC144 C2

SEE NOTE ABOVE

ITS A TYPE NON ZERO
IMP/MOST MESSAGE

YPCND 1 07

LA	1,0
CLEAR 1	
N1	1,MTYP(2),X'DF'
MASK TYPE	
IC	1,1,MTYP(2)
CET TYPE	
SLL	1,2
4 TO GIVE WORDS	

... PFC. VALUE

AND ONLY APPROPRIATE
BRANCH R TYLIST(1)

ICCC146	04
SR 13,12	
CLEAR 12	
IC	12,HEADER+1,MTYP
CET BYTE SIZE	
SR	14,14
CLEAR 14	
LW	15,HEADER+1,MTYP
CET BYTE CCOUNT	

ICCC1501	05
MR	14,12
MULTIPLY TO GIVE TEXT BITS	
ST	15,TEXTBITS
SET TEXT BITS	
LTR	15,15
ZERO TEXT BITS?	

ICCC1531	C6
RC	
P,ENDIMP	
YES - SC	
P,ENDIMP THIS	
ADDRESS	
CC=0	
1	
05	
ENDIMP	

/ 0.01

CHART TITLE - 'I2F INFLT INTERFAC'

```

/ 10001761 /
|
C1
...
17.12.
... RET

```

```

/ 10001831 /
|
O8
...
23.C1.
... BRP

```

```

/ 10001771 /
|
C2
...
16.C1.
... INR

```

ITS A NC - CP

```

06.15---> 05
NCP 1
MVL
ERRP1141.CCDE16
SET CODE 16
DECR CNCP

```

```

/ 10001781 /
|
C3
...
18.05.
... INS

```

REST AS FOR T1

```

/ 10001751 /
|
C4
...
15.06.
... ECC

```

```

/ 10001801 /
|
C5
...
15.15.
... EFF

```

```

/ 10001811 /
|
C6
...
20.01.
... BRP

```

```

/ 10001821 /
|
C7
...
20.12.
... RET

```

ITS A RECEIVER TO
SENDER

```

06.16---> 10
RTS 1
MVC
COMPLC(11).
HEADER+1MMOS
MOVE IN FHOST
MVC
COMPLC(11+14).
CLMISH+1M12)
MOVE IN PCV
SNOKEY
DECR PRS

```

```

10001911 NOTE 11
...
CL1
CLLKRTS121.X'02'
LINK < 27
JW YFS - FRRCP
JW

```

```

10001911 12
...
SFE NOTE
APCUE

```

CC=4

```

07.12---> 16
CM 1
MVL
ERRPCC.X'03'
APC PARAMETERS

```

```

...
6.14.
... FM1A

```

```

10002001 NOTE 13
...
CL1
CLLKRTS(2).
MAXLINK LINK <
MAX7
JW YFS - FRRCP
JW

```

```

10002001 14
...
SFE NOTE
APCUE

```

CC=11

```

10002021 15
LA 4.CEN3
GET COMPARISON
ORCER
L
15.11SEARCHM1
SEARCH FOR ENTRY
BY

```

/ 8.07

CHART TITLE - 'IPE TABLT INTERFACE'

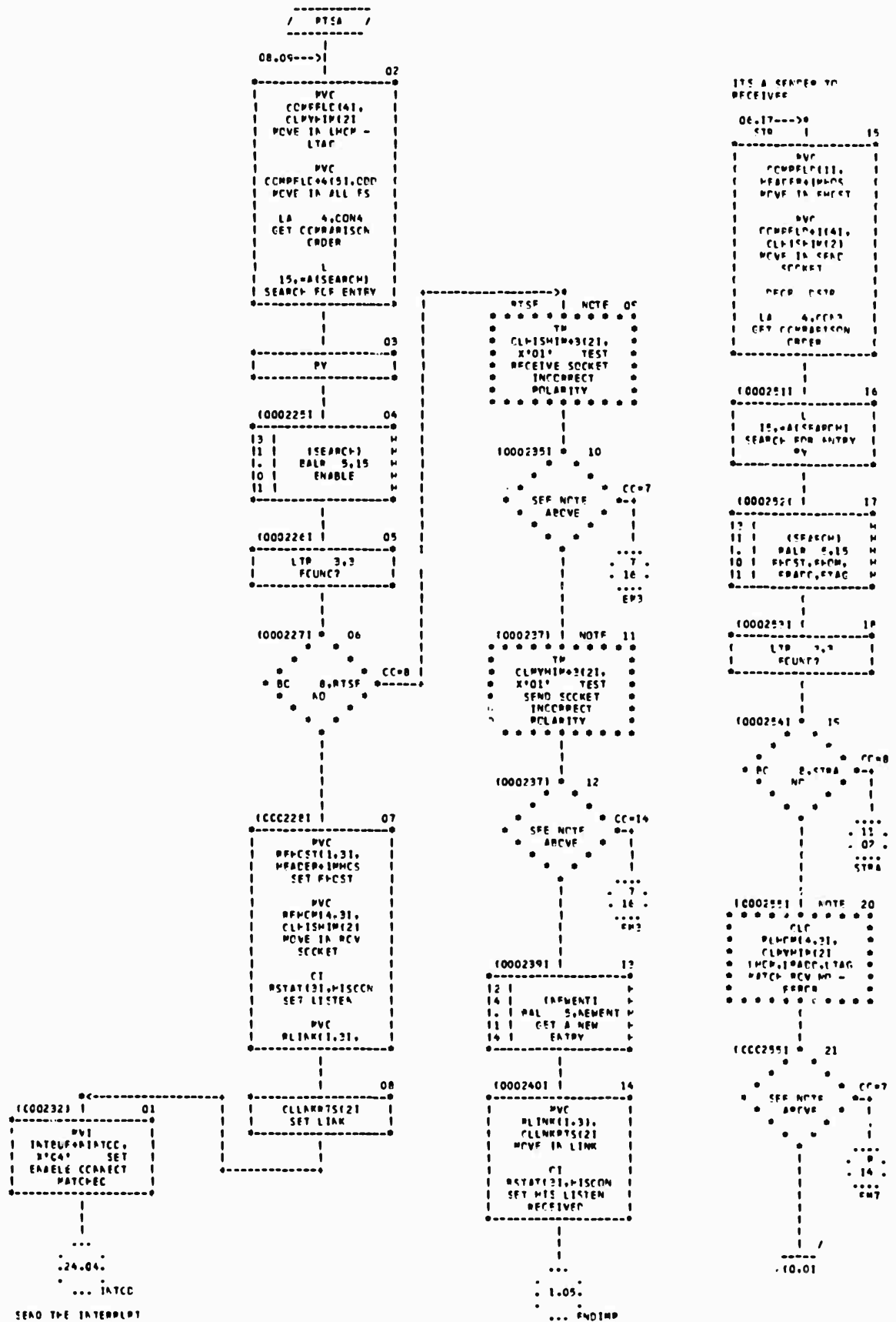


CHART TITLE - 'IMP INPUT INTERFACE'

175 A CLOSE

06.18---> 01
CLOSE 1

PVC
COMPLD(11),
HEADER(11)C
MOVE IN PCTST

PVC
COMPLD(14),
CLMISHT(12)
PCVF IN 'PV'
SECRET

DECR DCLS

LA 4,CCB
GET COMPARISON
CODE

(000320) 02

L
15,=A(SEARCH)
SEARCH FOR ENTRY
BY

(000321) 03

13 (SEARCH) M
11 PAIR 5,15 M
10 PCTST,PCTC, M
11 PRACC,FTAC M

(000322) 04

LTR 3,2
FOUND?

(000323) 05

PC 8,EM4
NO - CLOSE
SECRET
ERROR

PC 8,EM4
NO - CLOSE
SECRET
ERROR

(000324) NOTE 06

CLC
PLMCM(4,3),
CLMISHT(12)
LPCM,LRACC,LTAC,
YCLN, SCCR NC
- ERROR

(000324) C7

SEE NOTE
ABOVE

SEE NOTE
ABOVE

SEE NOTE
ABOVE

SEE NOTE
ABOVE

SEE NOTE
ABOVE

SEE NOTE
ABOVE

SEE NOTE
ABOVE

SEE NOTE
ABOVE

12.07--->
(000326) NOTE 08
TM
DELETED, WIPES
HIS CLS RECEIVED
YES - ERROR

(000326) 10

CC=7
SEE NOTE
ABOVE

SEE NOTE
ABOVE

CLOSED 11

L 5,IMC
GET HEAD OF IMC
C

CLOSED 12

LTR 4,5
TEST IT FOR ZERO

(000330) 13

PC
B,CLC
IT IS ZERO

PC
B,CLC
IT IS ZERO

PC
B,CLC
IT IS ZERO

PC
B,CLC
IT IS ZERO

PC
B,CLC
IT IS ZERO

PC
B,CLC
IT IS ZERO

PC
B,CLC
IT IS ZERO

PC
B,CLC
IT IS ZERO

PC
B,CLC
IT IS ZERO

PC
B,CLC
IT IS ZERO

PC
B,CLC
IT IS ZERO

PC
B,CLC
IT IS ZERO

PC
B,CLC
IT IS ZERO

PC
B,CLC
IT IS ZERO

PC
B,CLC
IT IS ZERO

PC
B,CLC
IT IS ZERO

PC
B,CLC
IT IS ZERO

12.05---> 08

EM4 1
MVT
PRACC,X'04'
ALL SECRET

EM4 1
MVT
PRACC,X'04'
ALL SECRET

EM4 1
MVT
PRACC,X'04'
ALL SECRET

EM4 1
MVT
PRACC,X'04'
ALL SECRET

EM4 1
MVT
PRACC,X'04'
ALL SECRET

EM4 1
MVT
PRACC,X'04'
ALL SECRET

EM4 1
MVT
PRACC,X'04'
ALL SECRET

EM4 1
MVT
PRACC,X'04'
ALL SECRET

EM4 1
MVT
PRACC,X'04'
ALL SECRET

EM4 1
MVT
PRACC,X'04'
ALL SECRET

EM4 1
MVT
PRACC,X'04'
ALL SECRET

EM4 1
MVT
PRACC,X'04'
ALL SECRET

EM4 1
MVT
PRACC,X'04'
ALL SECRET

EM4 1
MVT
PRACC,X'04'
ALL SECRET

PART TITLE - 'IMP INPUT INTERFACE'

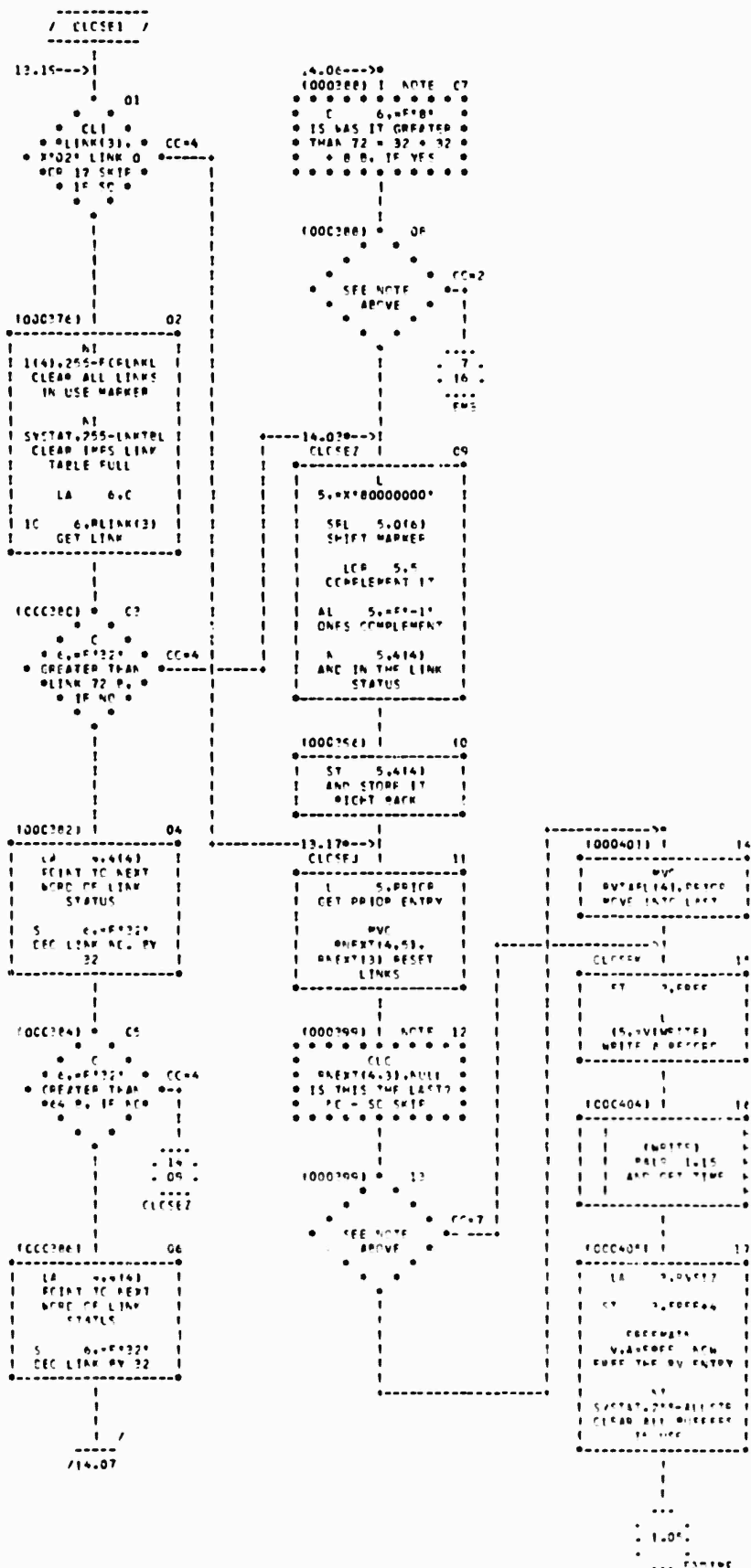


CHART TITLE - "IPE INPT INTERFACE"

ISSUE A CLOSE

13.070-->0
SACLS 1 01

```

    STM 0,15,SVENP
    SAVE

    LM 1,CLSPCF
    GET BUFFER SIZE
    FOR CLCSE

    ST 1,TC
    SET IT FOR

    ST 1,TC+4
    GET DATA
    PARAMETERS
  
```

(CCG421) 02

```

    GETDATA
    VC,LA+TC,BMF
    GET FREE STORE

    LTR 15,15
    DID WE GET 17?
  
```

(CCG423) 03

```

    CC=7
    7,AFRST
    AC - AC FREE
    STORE
  
```

.....
- 1C -
- 21 -
NFRST

(CCG424) 04

```

    LA 5,CLSPCF
    GET CLCSE FORMAT
    "CCP"

    L 6,TC
    GET LENGTH

    BCTR 6,C
    DECREMENT SINCE
    EX CCPPANC

    L 7,F
    GET FREE STORE
    ADDRESS
  
```

(CCG425) 05

```

    13 | (SETLRF)
    12 | EX 8,SETLRF
    11 | PERMIT THE
    10 | BUFFER
  
```

(000429) 06

```

    MVC
    A 4,IMHCS(1,71)
    DE 4,IMHCS SET
    DE 4,IMHCS SET

    MVC
    ANHXT+IPXT+
    CLMISHIM(4,71)
    RMHCR(3) SET "MV"
    SOCR

    MVC
    NMHXT+IPXT+
    CLMISHIM(4,71)
    RMHCR(3) SET
    "VCUB" SOCR
  
```

(000432) 07

```

    LA 3,INTRUF
    SET CTR AND
    RMHCR

    MVC
    RMHCR(1,3),
    HEADCR+IMHCS
    READY FOR CONN

    L 14,=VIC(2)
  
```

(000435) 08

```

    ST 7,01141
    SET C2 TO ADDRESS
    OF BUFFER

    L 14,=VIC(AN)
  
```

(000437) 09

```

    1 | (CERN)
    1 | PAID 13,14
    1 | LOAD THE THPS
    1 | CUE
  
```

(000438) 10

```

    LM 0,15,SVENP
    RESTORE
  
```

... REF. VALLE
RETURN TO CALLER PG 1

ITS AN ALLOCATE

06.19-->0
ALLEC 1 11

```

    LA 3,0

    ST 3,SRCHTST
    SET SEARCH TEST =
    C

    DEFR CALL

    MVC
    SRCHTST+3(11),
    HEADCR+IMHCS
    MOVE IN RMOST
  
```

(000450) 12

```

    MVC
    SRCHTST+1(11),
    CLMISHIM MOVE
    IN LINK
  
```

(000451) 13

```

    13 | (LANSRCHI)
    11 | PAL
    10 | 5,LANSRCH
    15 | LOCK FOR IT
  
```

(000452) 14

```

    LTR 3,3
    DID WE GET 17?
  
```

(000453) 15

```

    PC 0,FMS
    NO
  
```

(000454) 16

```

    NOTE
    TM
    RETATE(3),
    "MCLCS+MISCLS"
    EITHER CLCSE SET?
    FRMCR IF SC
  
```

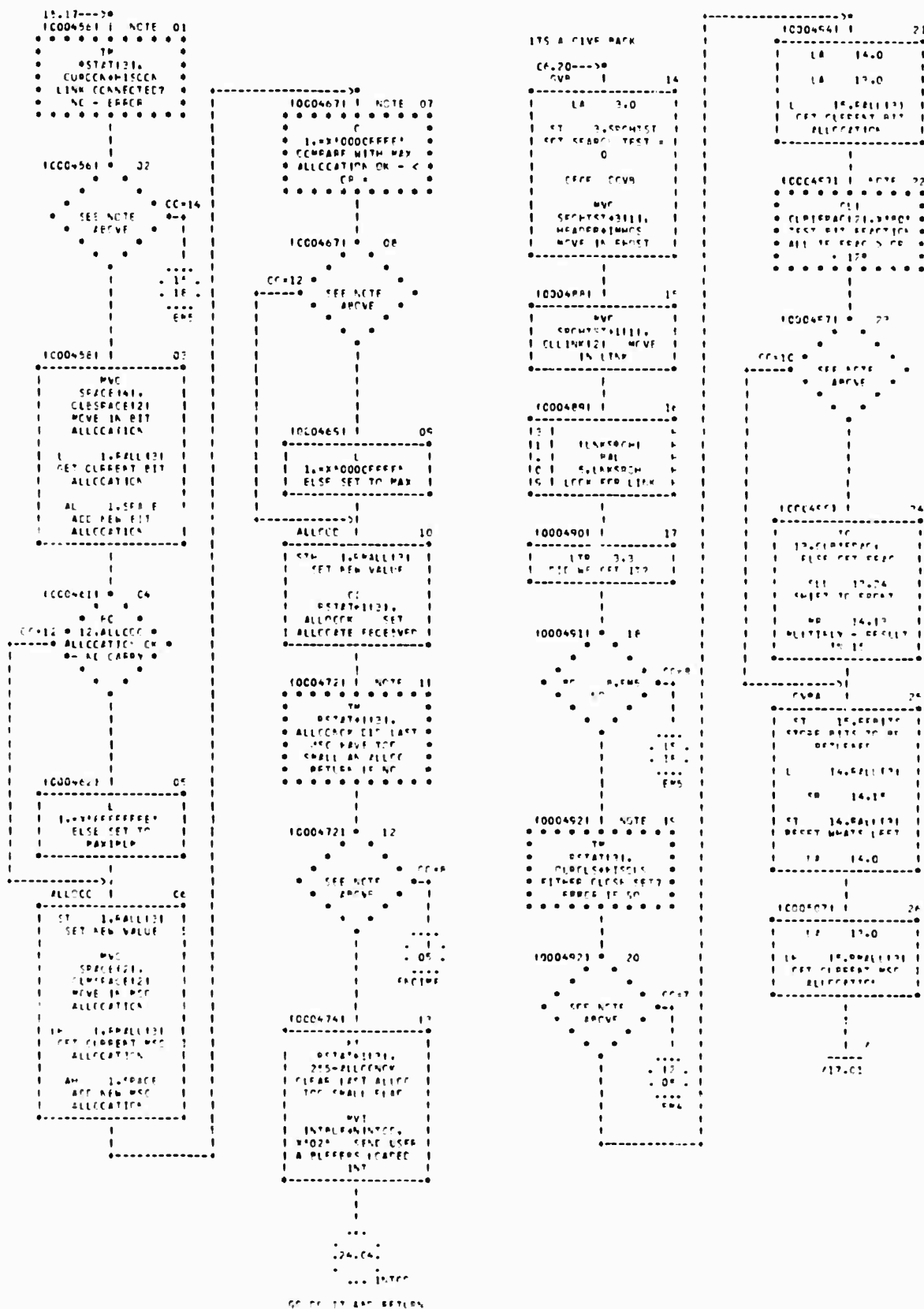
(000454) 17

```

    SEE NOTE
    ABOVE
  
```

716.C1

CHART TITLE - "IMS INPUT INTERFACES"

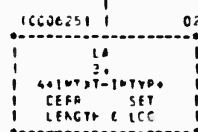
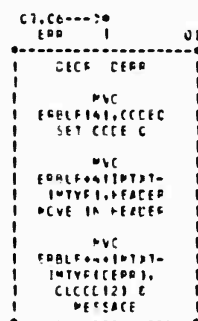
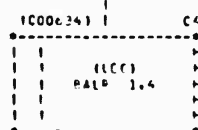
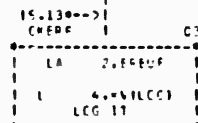


/ PCVE /



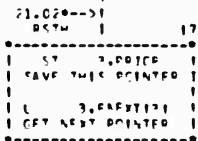
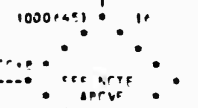
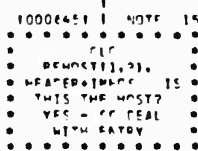
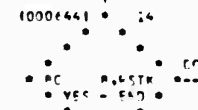
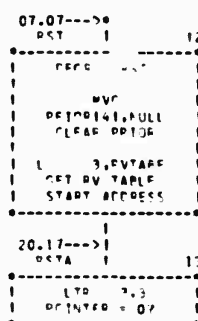
CHART TITLE - 'IMP INPUT INTERFACE'

ITS AN EROR

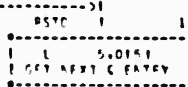
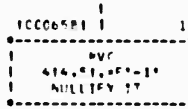
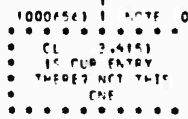
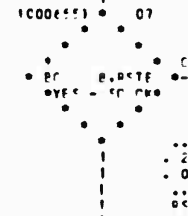
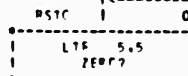
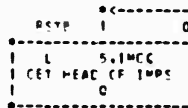
LCC WITHOUT CRASHING
2 IS BUFFER
3 IS LENGTH

...
1-0
... ENDIMP
AND RETERN

ITS A RESET

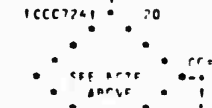
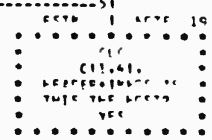
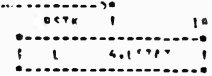


...
20-17
... RSTM
END REPEAT

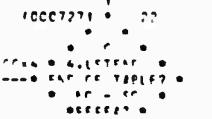
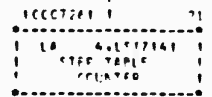
THIS CLEARS THE IMP
C

END REPEAT

DECF LINK TABLE

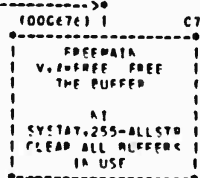
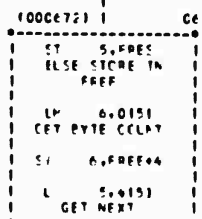
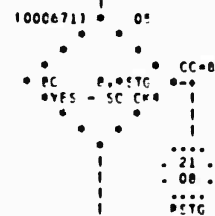
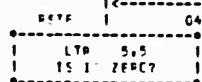
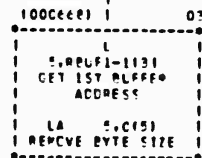
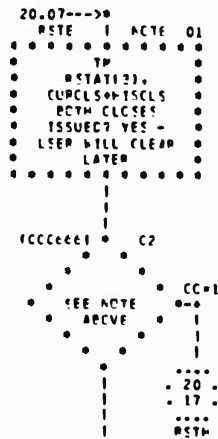


... 22
... 10
... DATA

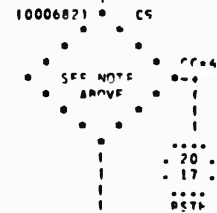
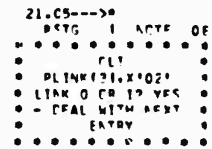
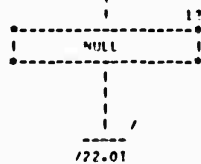
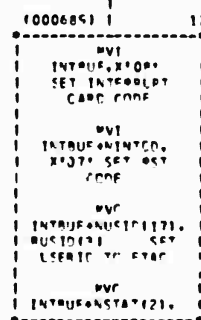
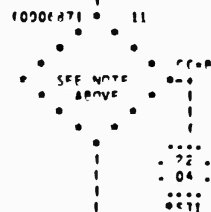
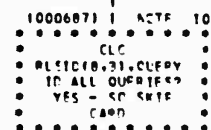


...
1-0
... ENDIMP
ELSE = GO TO 23

CHART TITLE - 'IMP INPUT INTERFACE'

THIS FREES THE
BUFFERS

AND THEN THE NEXT

TEST FOR CONTROL LINK
ENTRYWARN USER WITH
INTERLUPT CARD

/22.01

CHART TITLE - 'IMP INPUT INTERFACE'

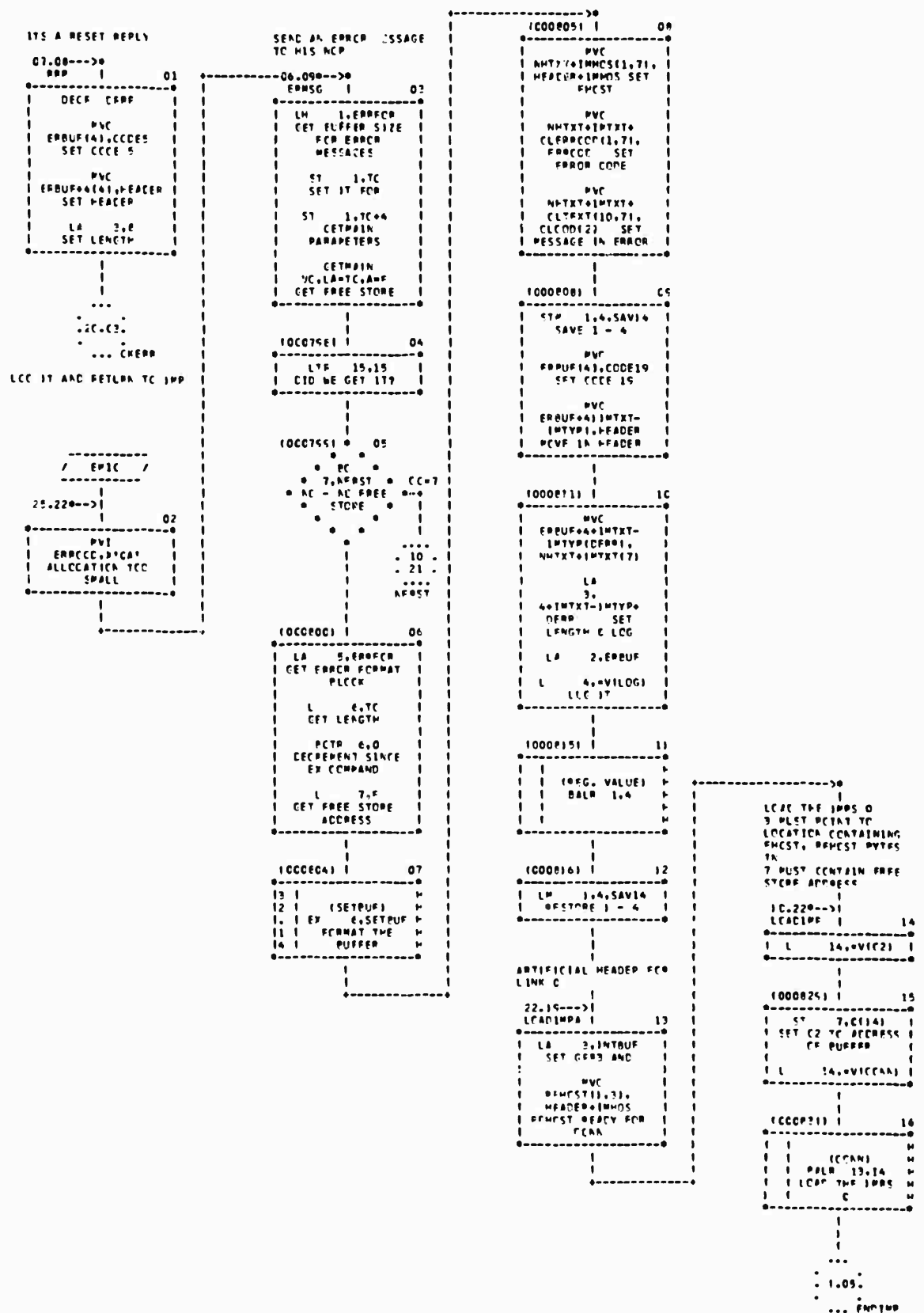


CHART TITLE - *IMP INFLT INTERFACE*

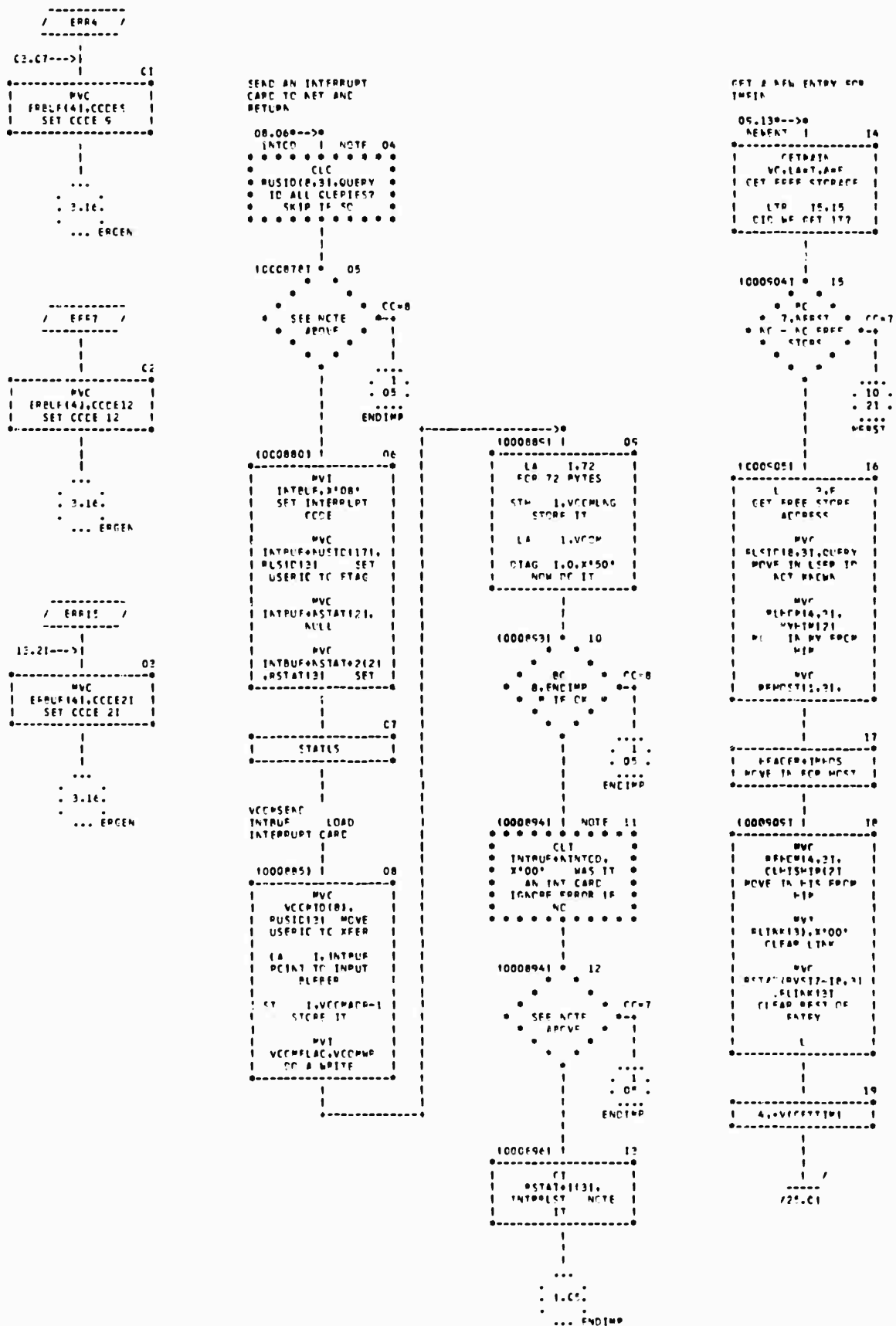


CHART TITLE - 'INF INFLT INTERFACE'

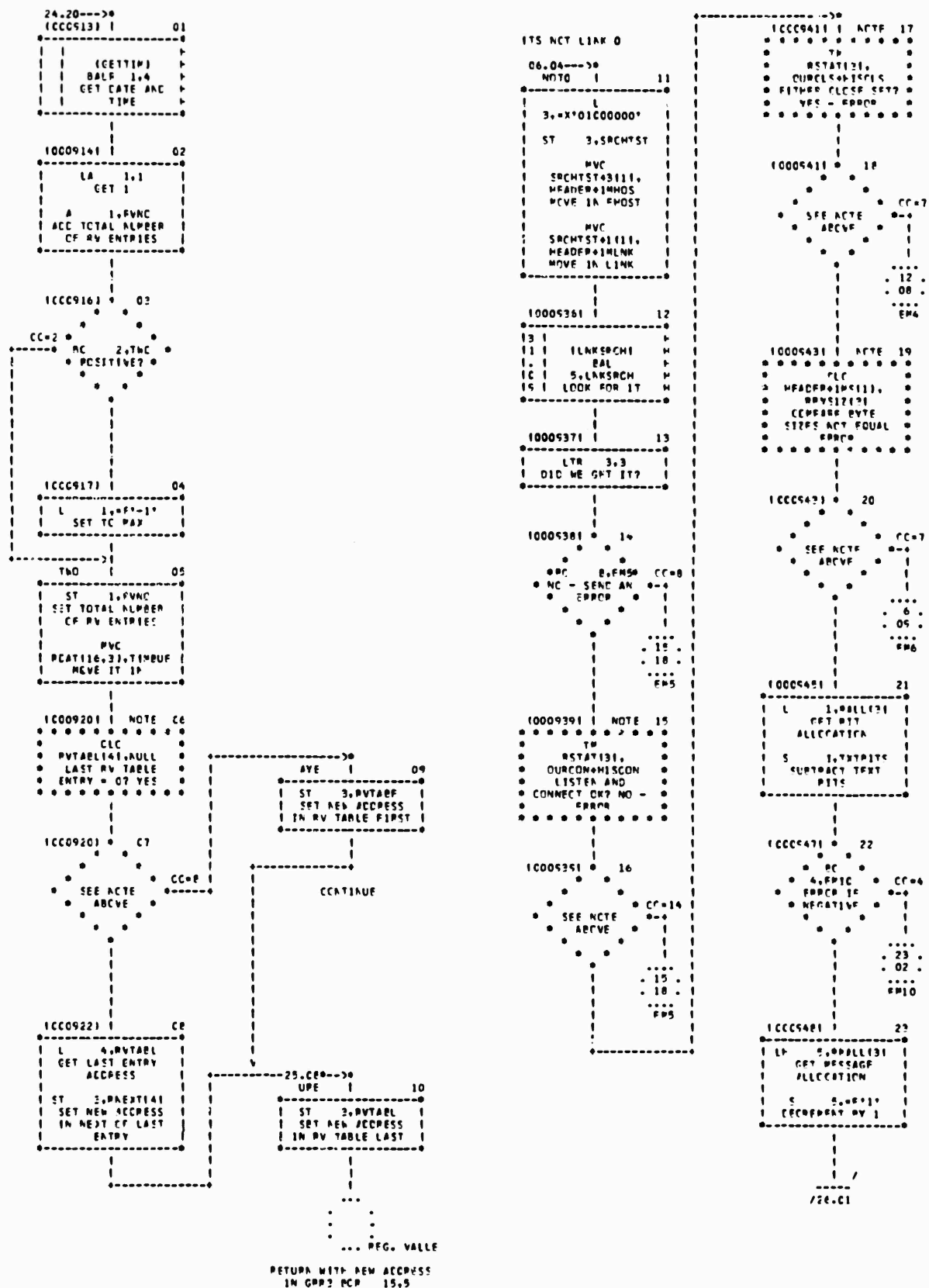
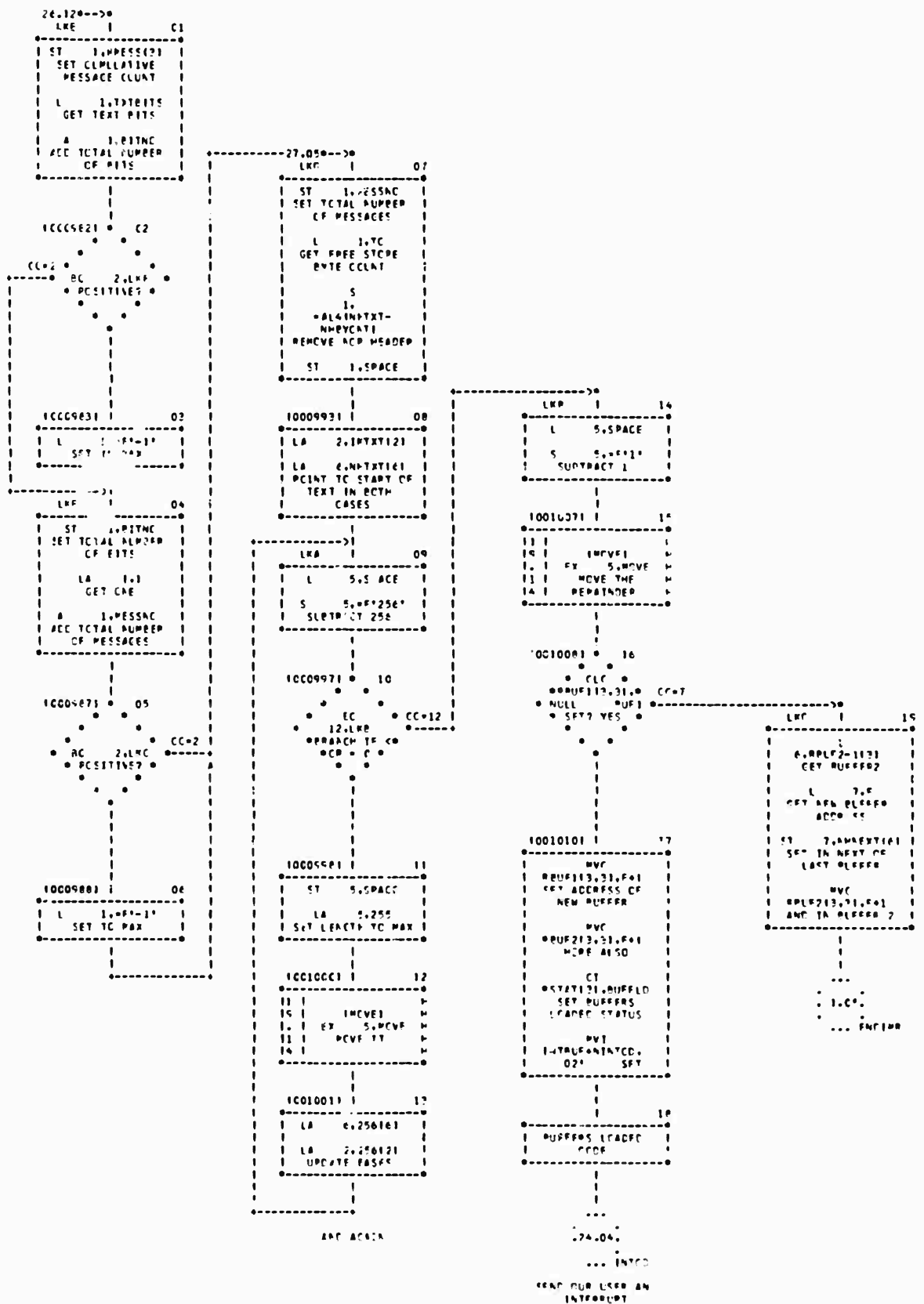
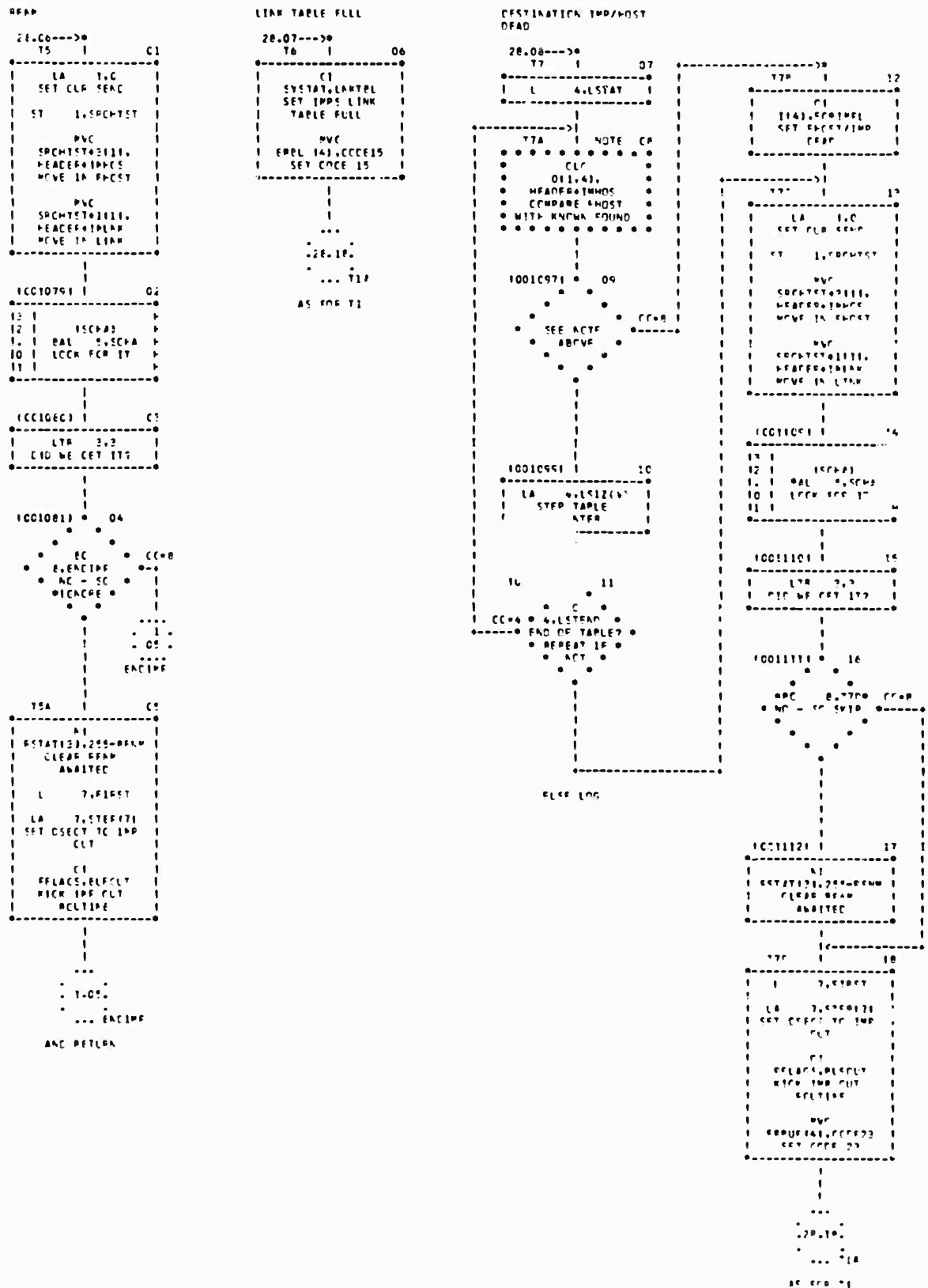


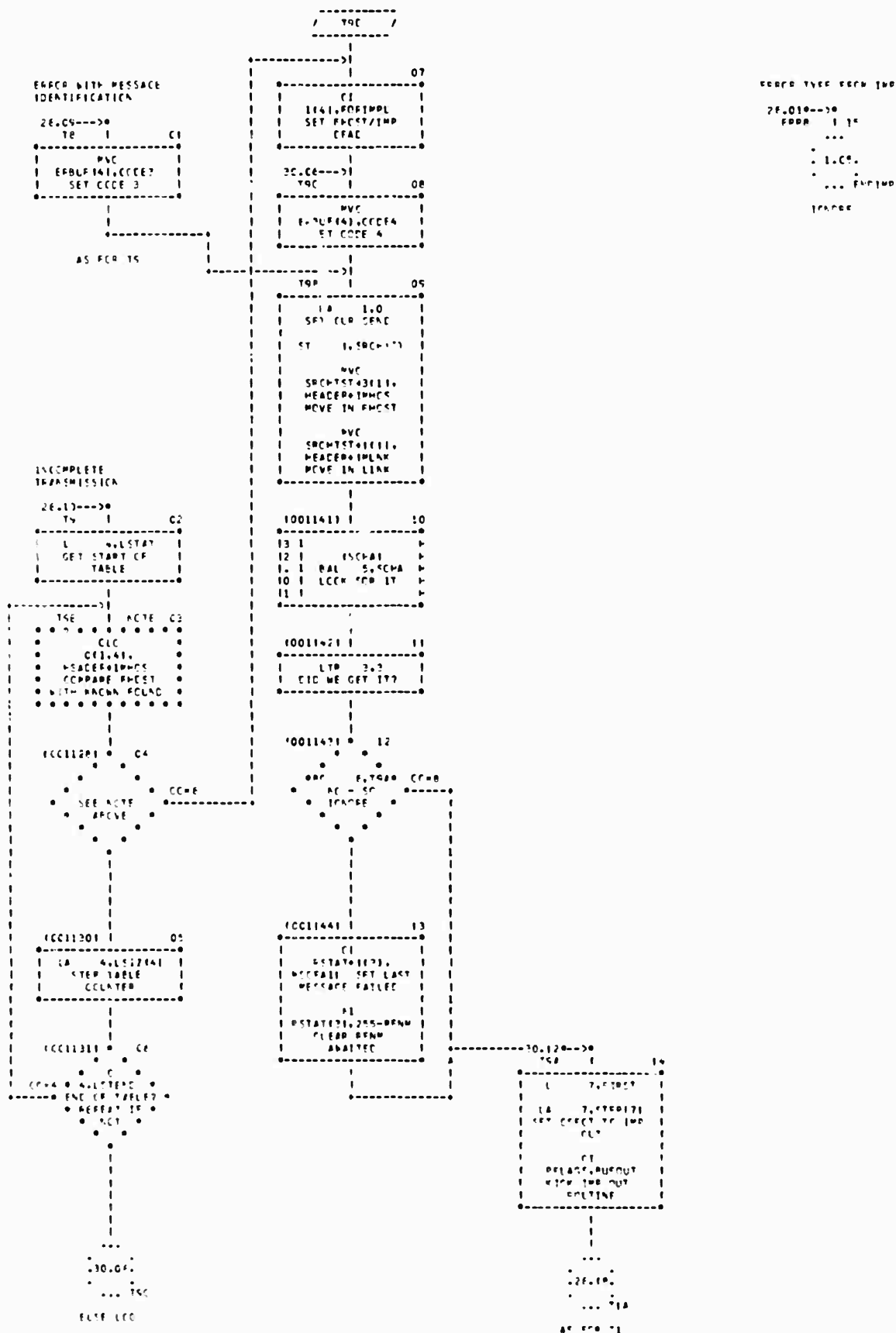
CHART TITLE - 'IMP INPUT INTERFACE'



PART TITLE - 'IMP INPLY INTERFACE'



CFA FILE - 'TYPE INPL. INTERFERENCE'



D-31

CHART TITLE - 'IMP INFL INTERFACE'

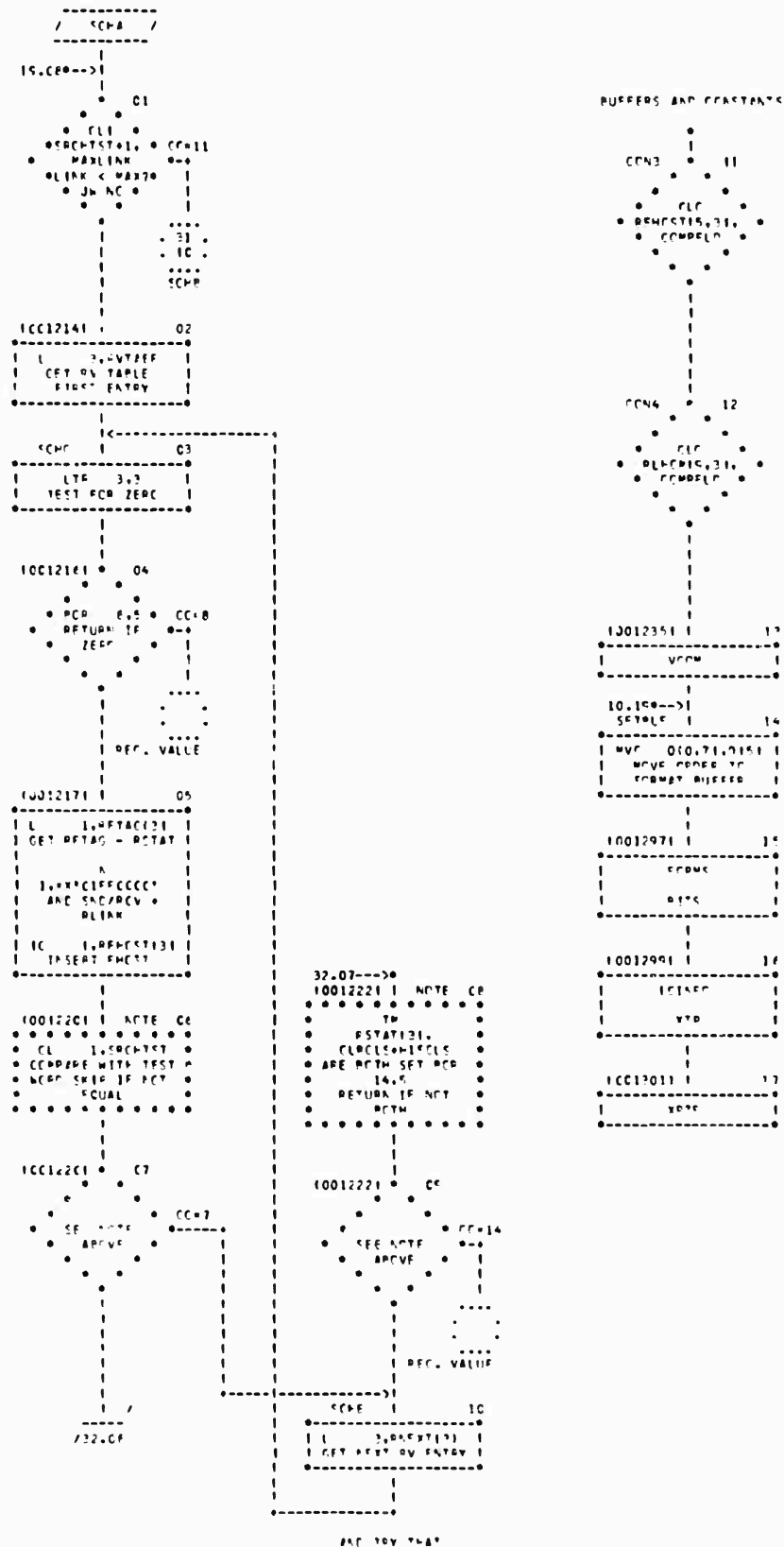


CHART TITLE - EQL STATEMENTS

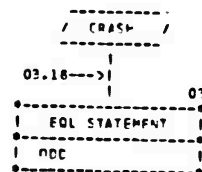
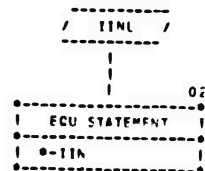


CHART TITLE - CONSTANTS AND STORAGE AREAS

(000053)	BASE1	DC	AL4(1MF1)	START BASE
(000441)	SVCMF	DS	16F	
(000478)	SRC1ST	DC	1F*0*	
(000479)	SPACE	DC	1F*0*	
(000540)	REMSCS	DC	1F*0*	
(000541)	REBIT5	DC	1F*0*	
(001211)	CMFFLD	DC	3F*0*	
(001271)	IIN	DC	CLB'READY 7*	*****
(001241)	FOR	DC	AL4(1MT1T1-1MT1P1R1)	PREYCCCL HEADER BITS
(001242)	1MT1T5	DC	1F*0*	
(001243)	1MT1T5	DC	1F*0*	
(001244)	INTPLF	DC	2F*0*	INTERPUPT BUFFER
(001245)	T	DC	2AL4(RV*17)	RV TABLE SIZE
(001246)	TA	DC	2F*28*	
(001247)	TR	DC	2F*24*	
(001248)	TC	DC	2F*0*	
(001249)	TD	DC	2F*16*	
(001250)	F	DC	1F*0*	
(001251)	FREE	DC	1F*0*	
(001252)	CLUBY	DC	CLB'?????????	
(001254)	CCC	DC	AL4'FFFFFFFFFFFFFFF*	
(001257)	NULL	DC	1F*0*	
(001258)	HEADER	DC	3F*0*	
(001259)	FC1M1	DC	1F*0*	
(001260)	EYTES	DC	1F*0*	
(001261)	PYSAN	DC	1F*0*	
(001262)	ERRCCD	DC	1F*0*	
(001263)	CURALLCC	DC	1F*320C0*,1*10C*	
(001266)	FRICR	DC	1F*0*	
(001267)	WCEAC	DC	1F*0*	
(001268)	PCFREEIT	DC	1F*0*	
(001274)	SAV14	DC	4F*0*	
(001270)	ERRLF	DC	10F*0*	
(001272)	CODEC	DC	FL4* 0 *	
(001273)	CODE1	DC	FL4* 1 *	
(001274)	CODE2	DC	FL4* 2 *	
(001275)	CODE3	DC	FL4* 3 *	
(001276)	CODE4	DC	FL4* 4 *	
(001277)	CODE5	DC	FL4* 5 *	
(001278)	CODE6	DC	FL4* 6 *	
(001279)	CODE7	DC	FL4* 7 *	
(001280)	CODE8	DC	FL4* 8 *	
(001281)	CODE9	DC	FL4* 9 *	
(001282)	CODE10	DC	FL4* 10 *	
(001283)	CODE11	DC	FL4* 11 *	
(001284)	CODE12	DC	FL4* 12 *	
(001285)	CODE13	DC	FL4* 13 *	

CHART TITLE - CONSTANTS AND STORAGE AREAS

(001286)	CODE14	DC	CL4* 14 *
(001287)	CODE15	DC	CL4* 15 *
(001288)	CODE16	DC	CL4* 16 *
(001289)	CODE15	DC	CL4* 15 *
(001290)	CODE20	DC	CL4* 20 *
(001291)	CODE21	DC	CL4* 21 *
(001292)	CODE22	DC	CL4* 22 *
(001293)	CODE23	DC	CL4* 23 *
(001294)	CODE24	DC	CL4* 24 *

CHART TITLE - 'IMP OUTPUT INTERFACE'

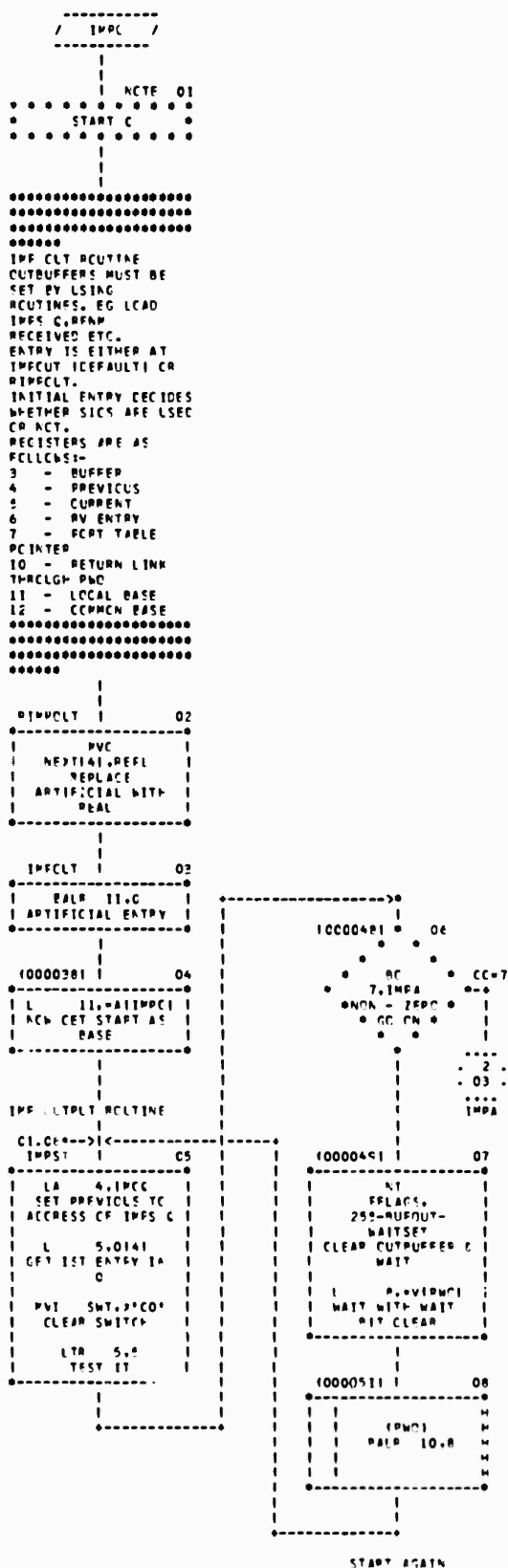


CHART TITLE - 'INF OUTPUT INTERFACE'

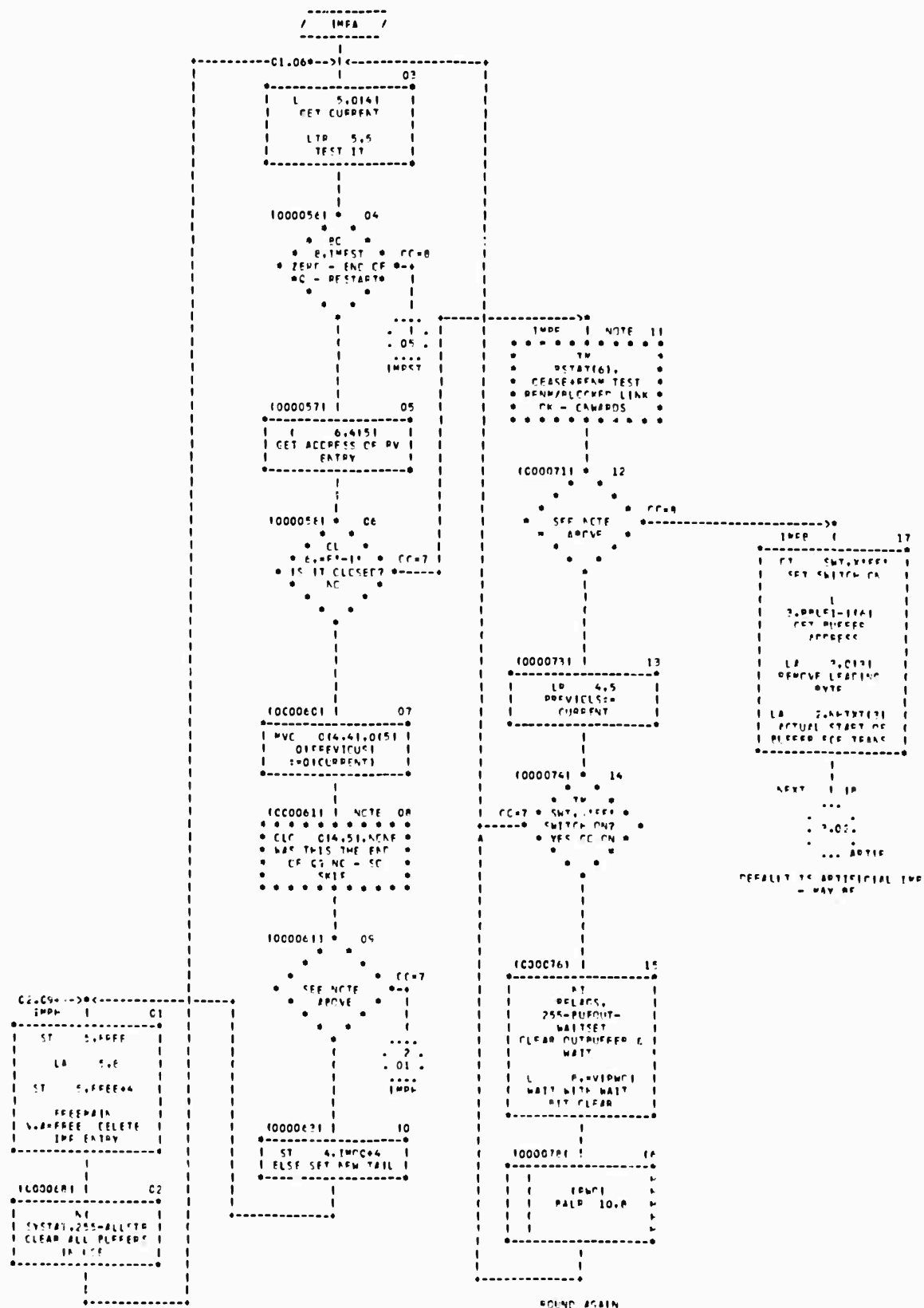


CHART TITLE - 'IMP OUTPUT INTERFACE'

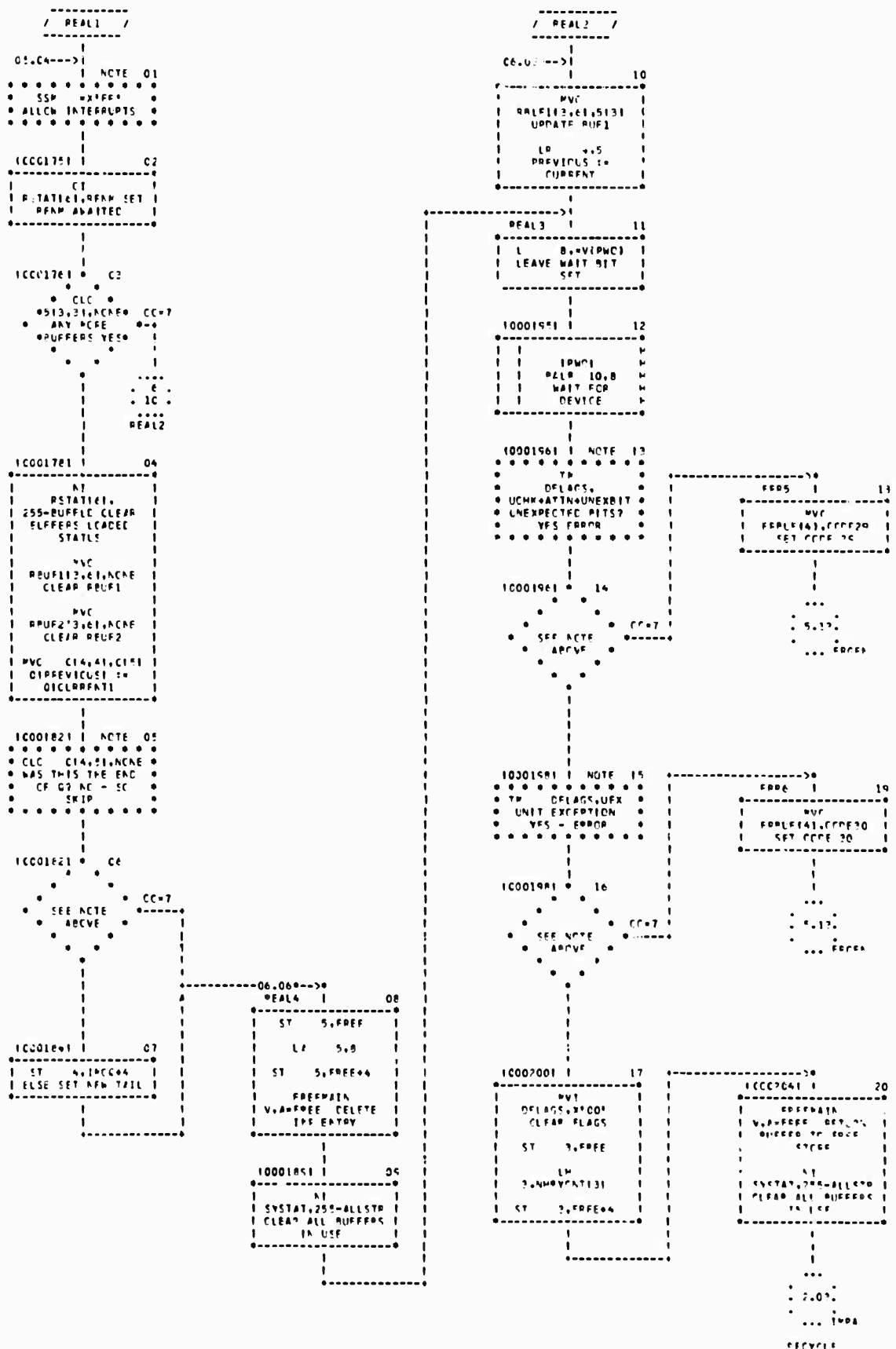
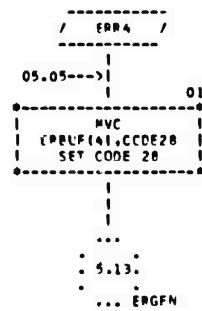


CHART TITLE - 'IPF CLTPUT INTERFACE'



CONSTANTS

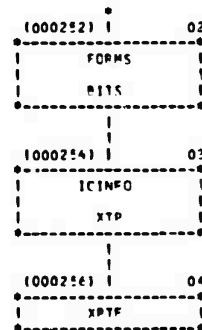


CHART TITLE - ECL STATEMENTS

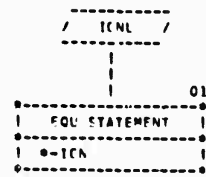
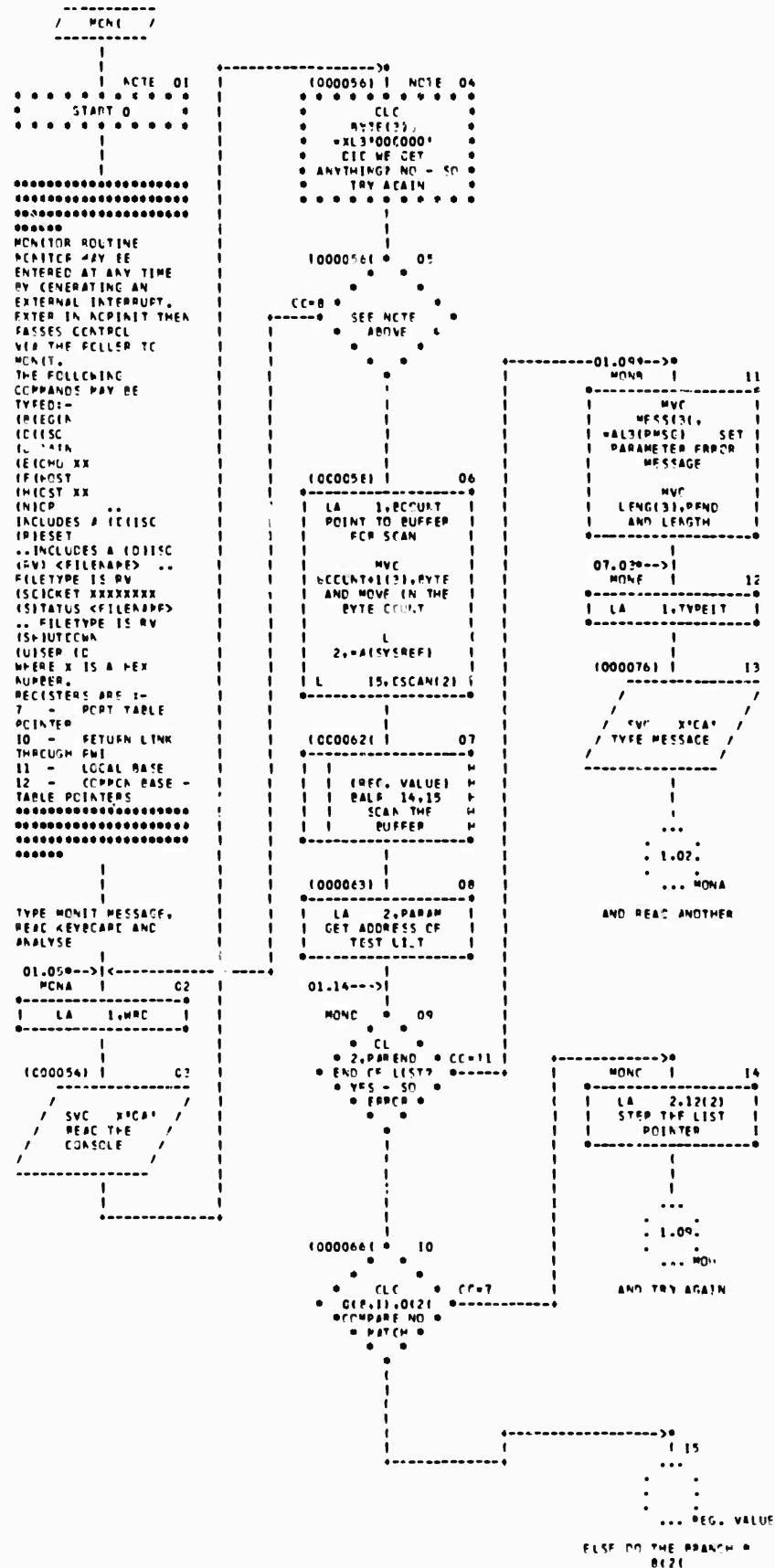


CHART TITLE - CONSTANTS AND STORAGE AREAS

(000234)	SWT	DC	1F°C
(000237)	CLWP	DC	1F°C
(000239)	ACRE	DC	1F°0
(000240)	ION	DC	CL2°READY 44° 99999999
(000242)	PRFE	DC	2F°C
(000243)	CRAS	DC	1F°-J
(000244)	ERBUF	DC	1F°C
(000245)	CODE25	DC	CL4° 25 °
(000246)	CODE26	DC	CL4° 26 °
(000247)	CODE27	DC	CL4° 27 °
(000248)	CODE28	DC	CL4° 28 °
(000249)	CODE29	DC	CL4° 29 °
(000250)	CODE30	DC	CL4° 30 °

CHART TITLE - MONITOR ROUTINE



REFIN ROUTINE

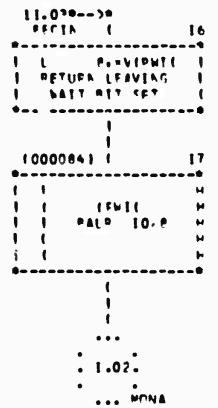


CHART TITLE - 'CATCHER 5 JUNE'

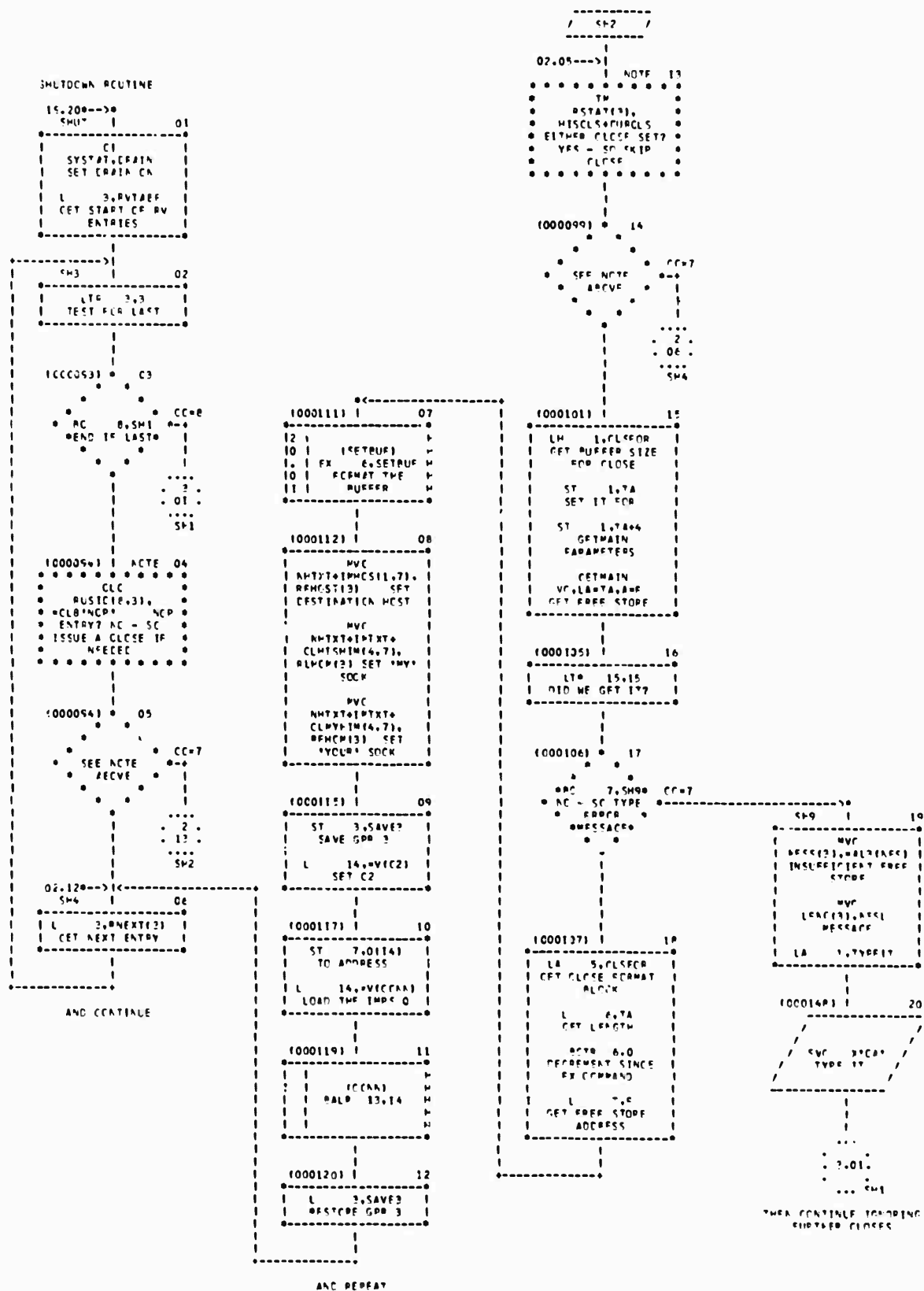


CHART TITLE - 'MONITOR ROUTINE'

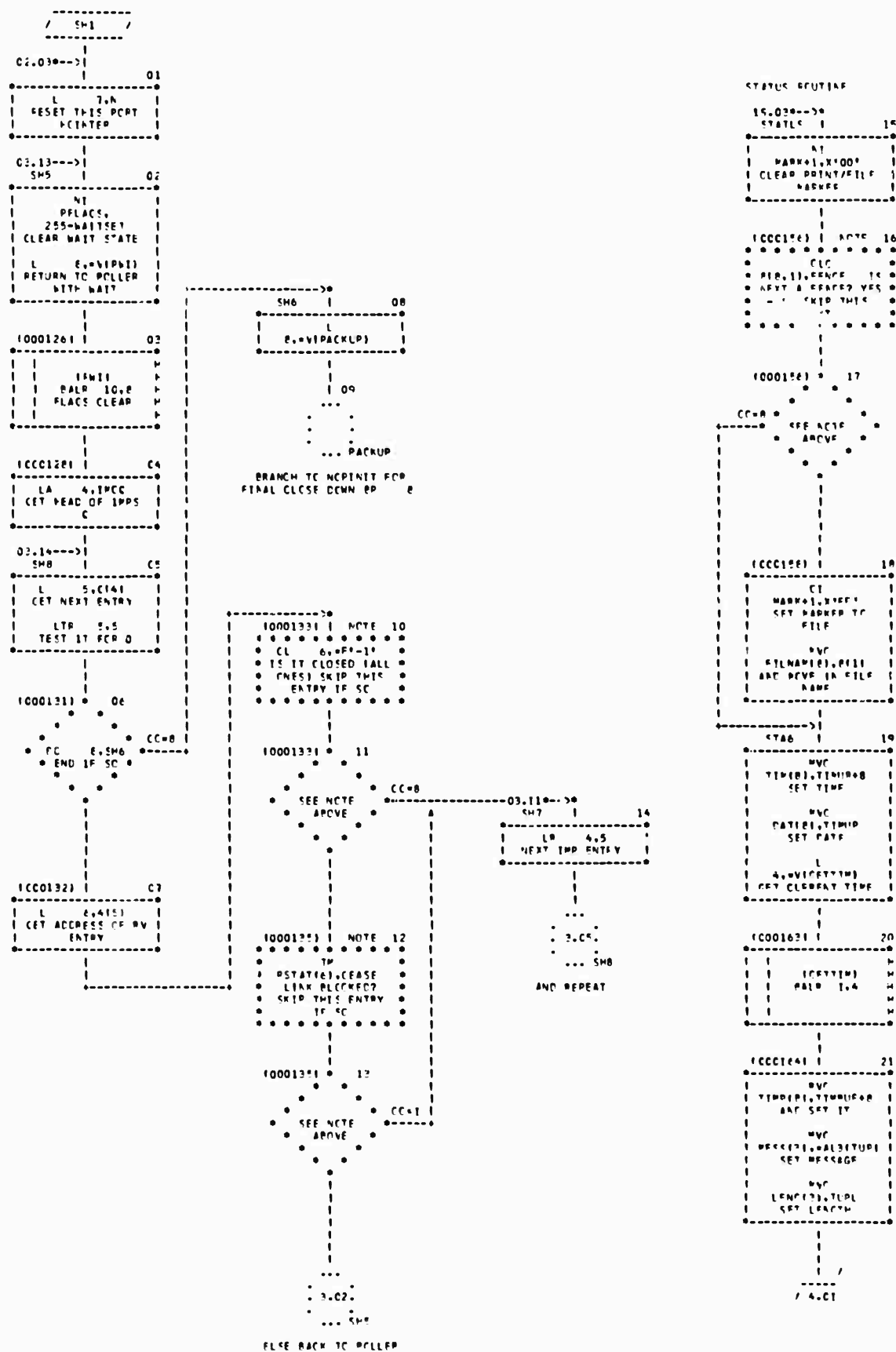


CHART TITLE - 'MCNITER RCLTIME'

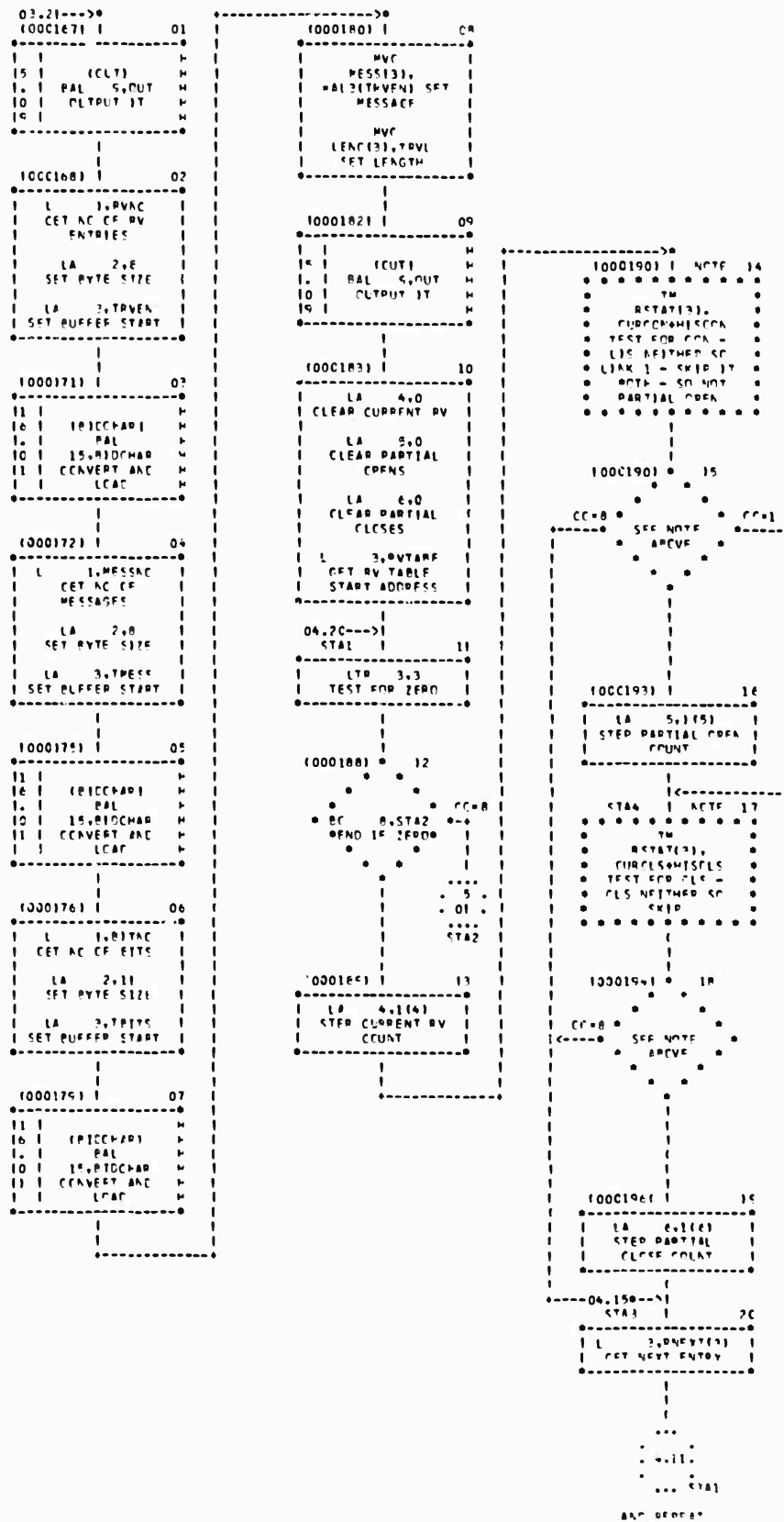


CHART TITLE - 'MONITOR ROUTINE'

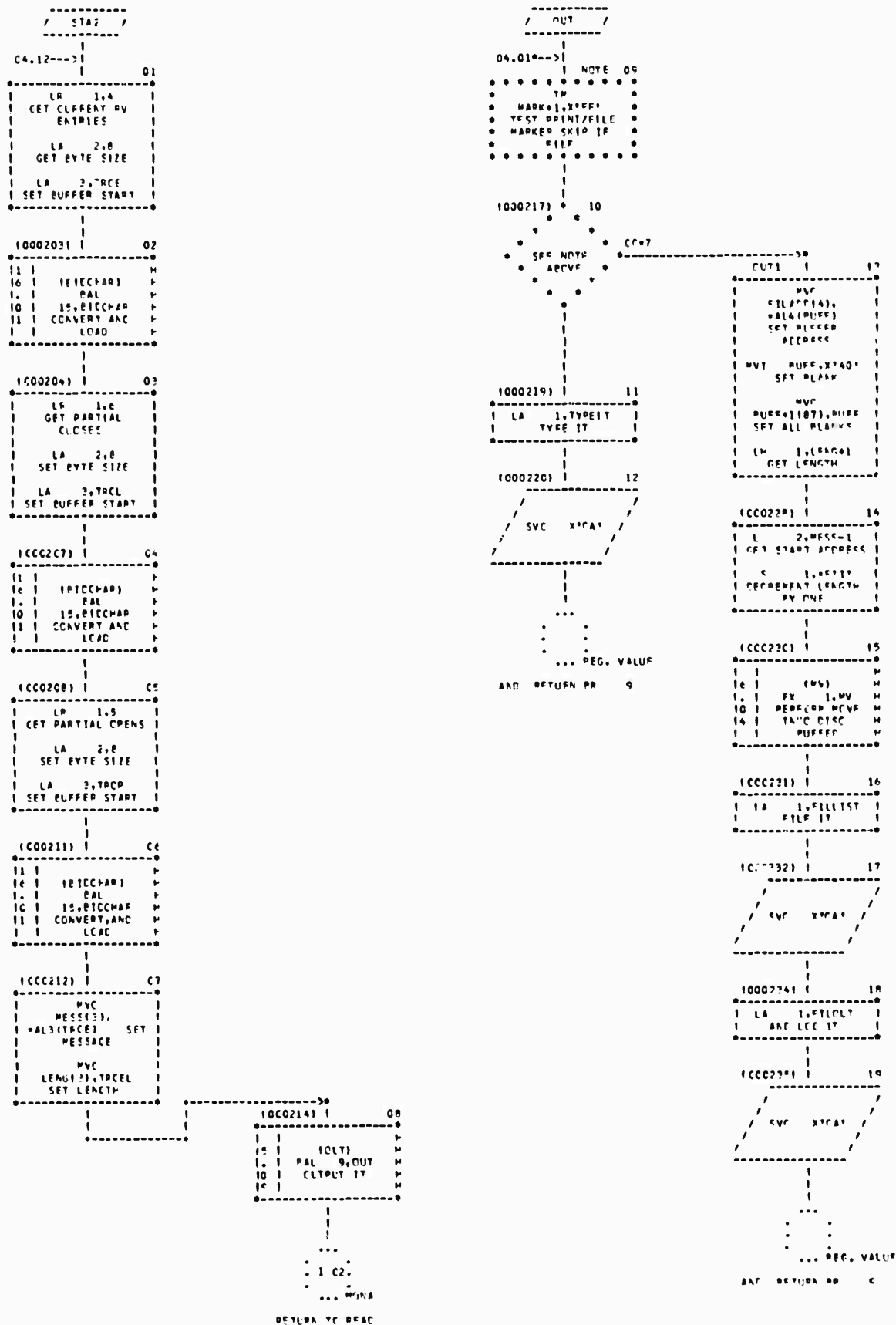


CHART TITLE - 'MONITOR ROUTINE'

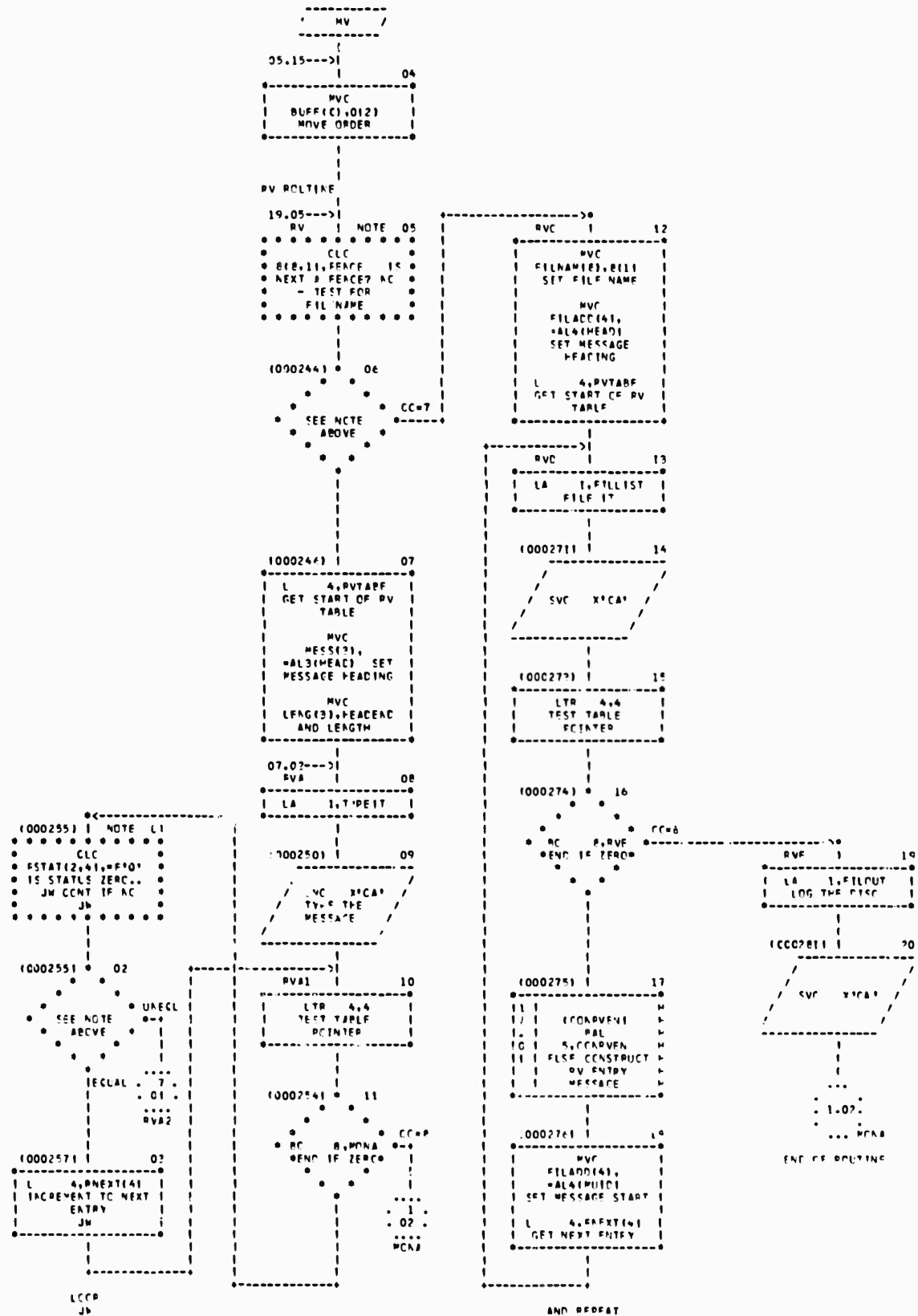


CHART TITLE - 'PCATCH ROUTINE'



USER ROUTINE

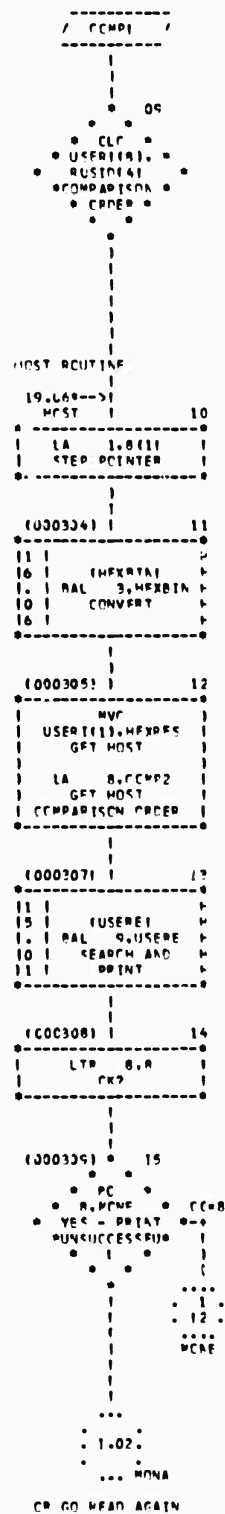
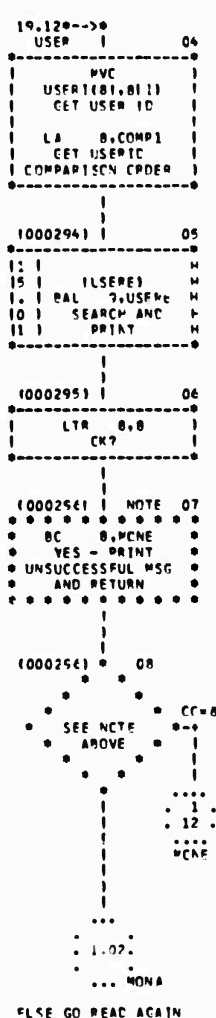


CHART TITLE - 'PCHINTER ROUTINE'

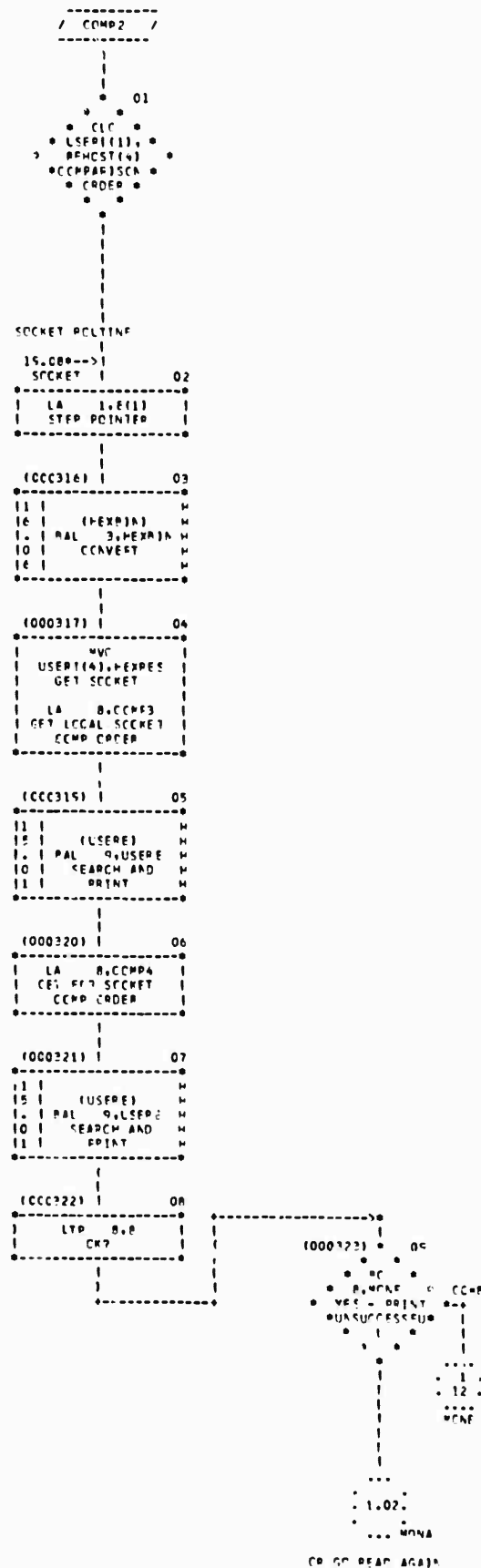


CHART TITLE - 'MONITOR ROUTINE'

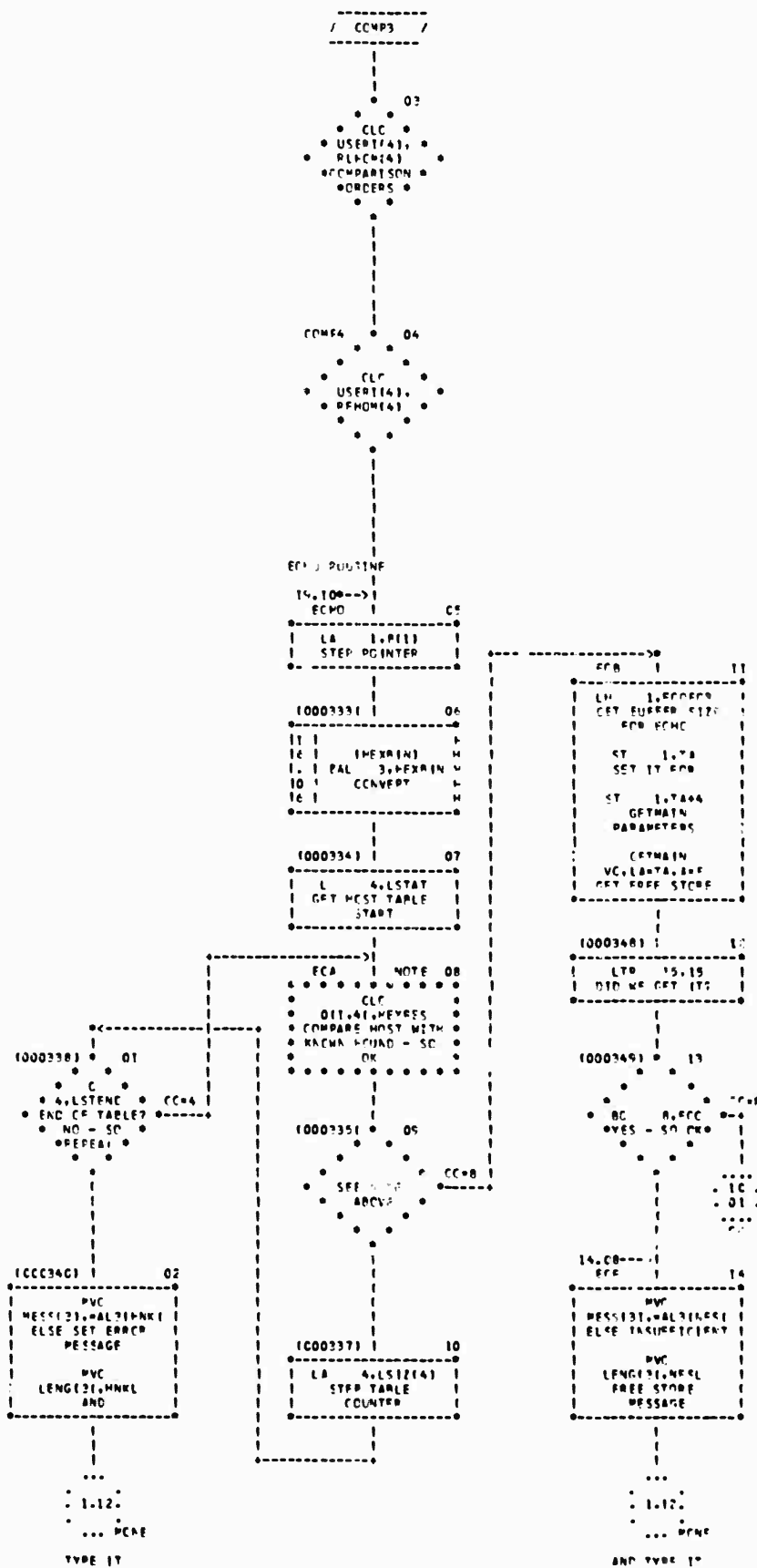


CHART TITLE - "CATCHER ROUTINE"

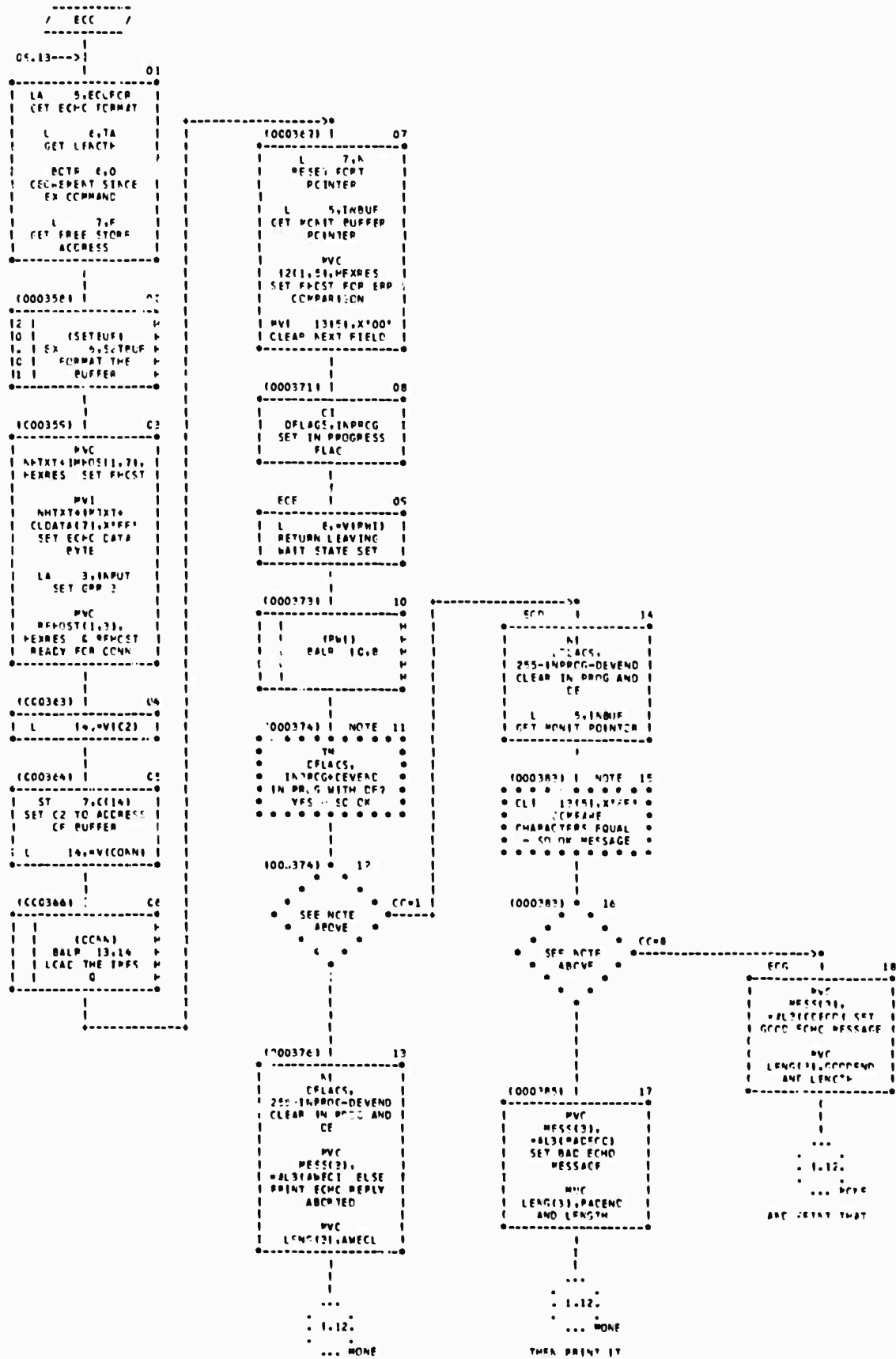


CHART TITLE - 'MONITOR ROUTINE'

DISCONNECT

14.050-->
 DISC 1 01

LA	2,RIJUSFO
DIAG	2,3,0
LA	2,TIMEON+4(3)
DIAG	2,3,0
ST	3,TEMP

(000404) 02

TEMP+DISCARDY,
DISCARDY,
DISCONNECTED
ALREADY? YES - SC
BEGIN

(000404) 03

SEE NOTE
ABOVE

... 1 ...
 ... 16 ...
 BEGIN

(000404) 04

LA	2,PIS
LA	3,DISL
DIAG	2,3,0
DISCONNECT	

... 1.16 ...
 ... BEGIN

DRAIN ROUTINE

10.220-->
 DRA 1 05

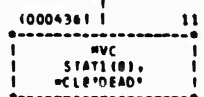
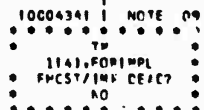
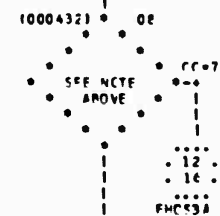
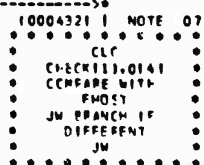
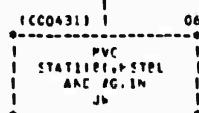
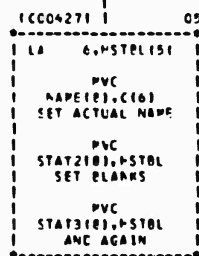
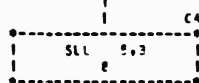
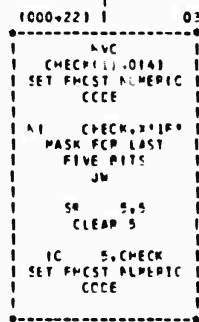
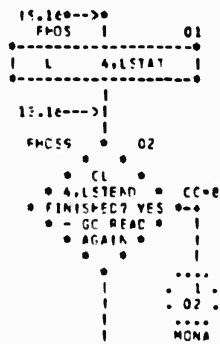
CI
SYSTAT,DRAIN
SET DRAIN ON

... 1.02 ...
 ... MONA

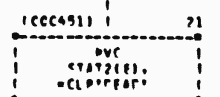
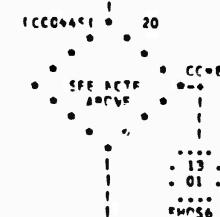
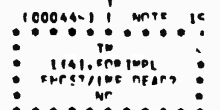
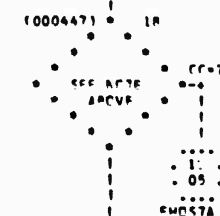
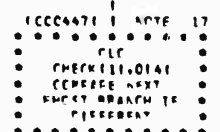
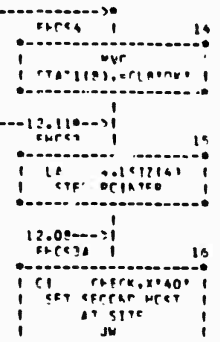
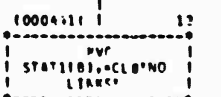
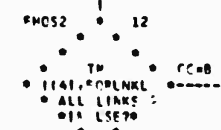
RETURN TO MONIT

CHART TITLE - 'MONITOR ROUTINE'

FOREIGN POST ROUTINE



12.15.
... FMOS3



17.04.
... FMOS7

CHART TITLE - 'MONITOR ROUTINE'

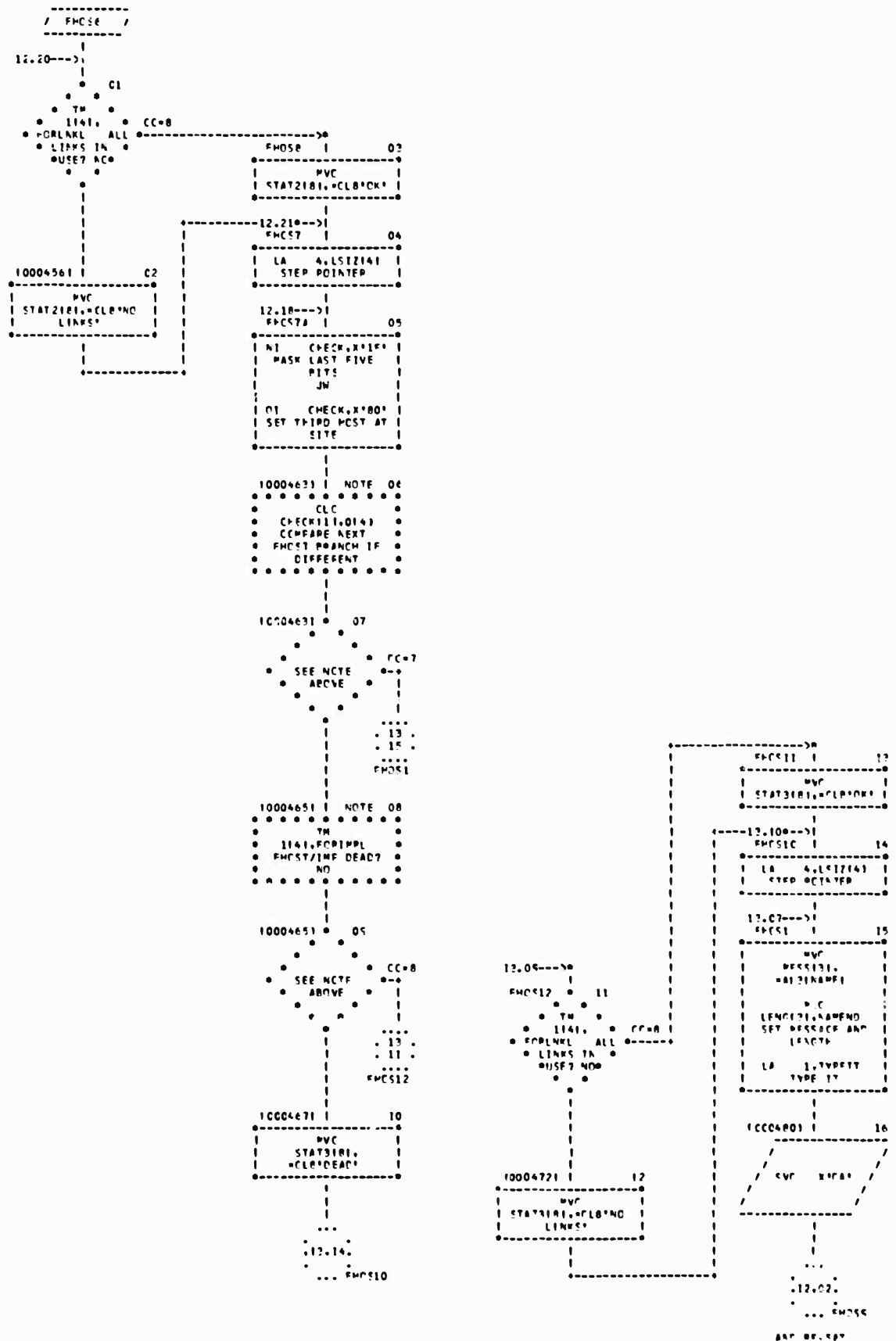
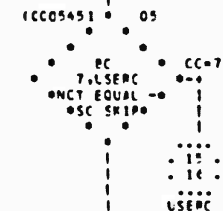
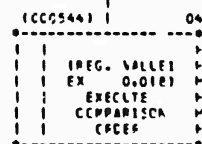
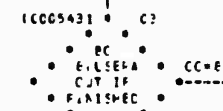
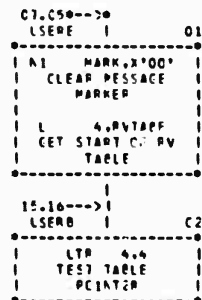


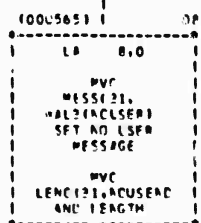
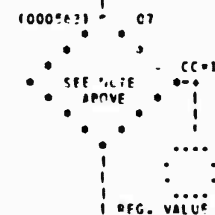
CHART TITLE - 'MCNITCH ROUTINE'

 SEARCH AND PRINT
 MATCHING LINES
 LINK IS GPR 5, ENTER
 WITH GPR 8 POINTING
 TO CCPR - ISSA CPCR
 USES 1 2 3 4 * AND 15
 ALSO, 8 IS ZERO IF
 UNSUCCESSFUL



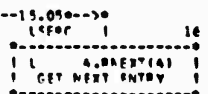
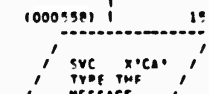
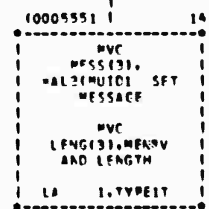
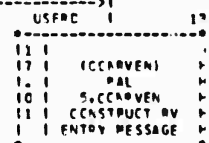
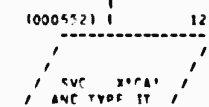
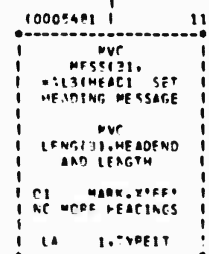
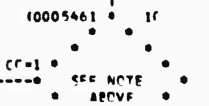
15.05

10005461 NOTE 06
 TM MARK,X'FF'
 MESSAGE MARKER
 SET? PCP 1,5
 YES - SO THATS
 ALL



PTLUP BR 5

15.05-->0
 10005461 NOTE 09
 TM MARK,X'FF'
 MESSAGE MARKER
 SET? PCP 1,5
 YES - SO NO
 MESSAGE HEADING



15.02

AND TOY THAT

CHART TITLE - 'PCHITCHER ROUTINE'

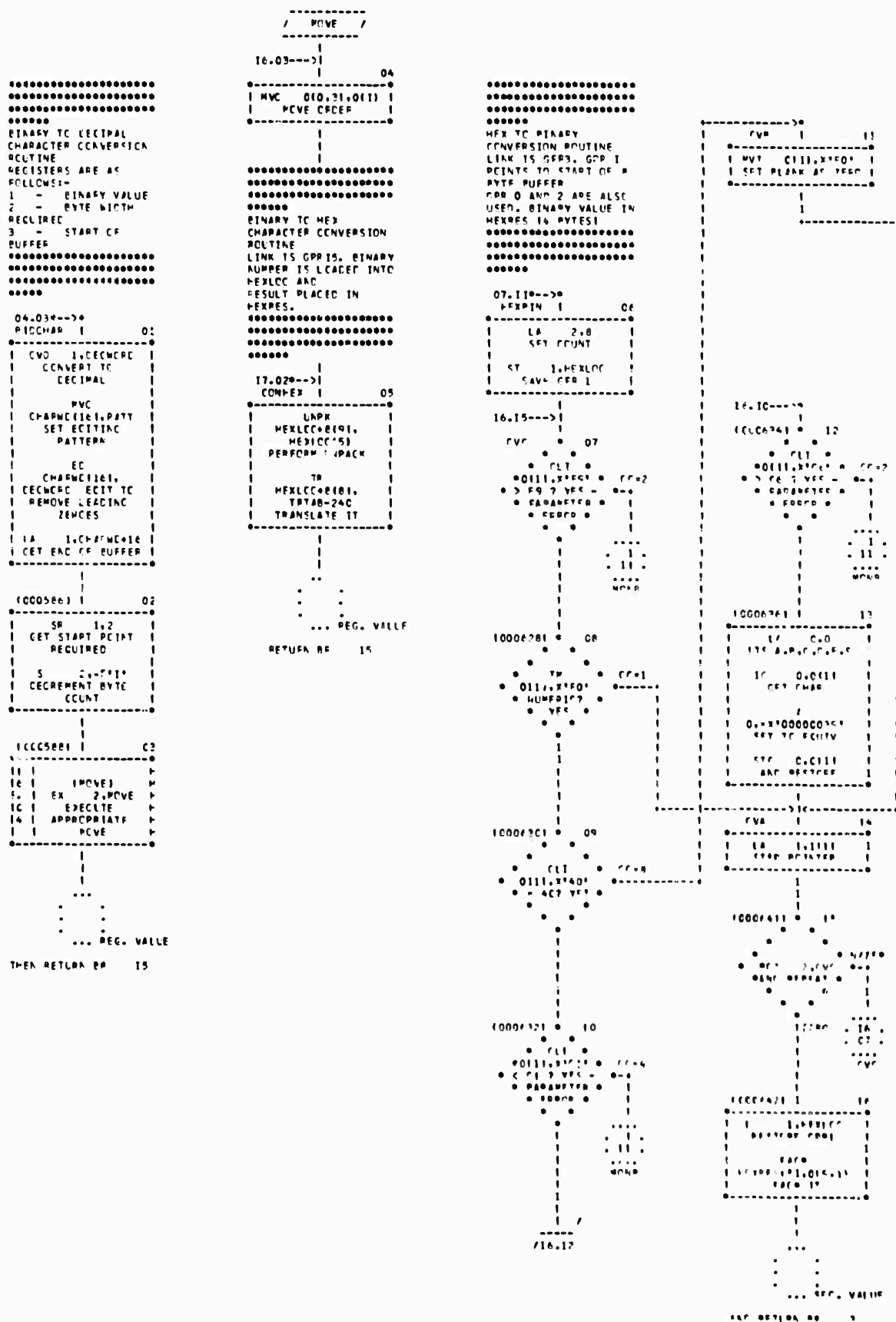


CHART TITLE - 'PACATCH ROUTINE'

 CONSTRUCT AN RV ENTRY
 ROUTINE
 REGISTERS 1,2,3 & 15
 ARE USED BY RICHARD
 AND CONNEX. GPR 4
 MUST POINT TO THE
 START OF THE RV ENTRY
 CONCERNED. GPR 15 THE
 LINK. RESULT IS
 LOADED INTO W10
 BUFFER.

06.170-->0

CCARVFA 1

01

MVF
 M101(8),R101(4)
 SET USERS ID

MVF
 MEXLOC(4),
 R101(4) MOVE IN
 LOCAL SOCKET

(CCCC62) 1

02

11 1 (CONNEX) M
 12 1 RAL M
 13 1 15,CONNEX M
 14 1 CONVERT TO HEX M

(CCCC63) 1

03

MVF
 M101(2),MEXRES
 SET LHM

MVF
 M102(4),MEXRES+2
 SET LPADG

MVF
 M103(2),MEXRES+6
 SET LTAC

MVF
 MEXLOC(1),
 R101(4) MOVE IN
 PORT

(CCCC67) 1

04

11 1 (CONNEX) M
 12 1 (CONNEX) M
 13 1 RAL M
 14 1 15,CONNEX M
 15 1 CONVERT TO HEX M

(CCCC68) 1

05

MVF
 M101(2),MEXRES
 SET FHOST

MVF
 MEXLOC(4),
 R101(4) MOVE IN
 R SOCKET

(000670) 1

06

11 1 (CONNEX) M
 12 1 RAL M
 13 1 15,CONNEX M
 14 1 CONVERT TO HEX M

(000671) 1

07

MVF
 M101(2),MEXRES
 SET FLOW

MVF
 M102(4),MEXRES+2
 SET FRADG

MVF
 M103(2),MEXRES+6
 SET F7AC

LA 1,0

(000675) 1

08

11 1 R101(4)
 SET LINK

LA 2,4
 SET BYTE SIZE

LA 3,M101
 SET BUFFER START

(000678) 1

09

11 1 (RICHARD) M
 12 1 RAL M
 13 1 15,RICHARD M
 14 1 CONVERT AND
 15 1 LOAD M

(000679) 1

10

MVF
 MEXLOC(2),
 R101(4) MOVE IN
 STATUS

(000681) 1

11

11 1 (CONNEX) M
 12 1 (CONNEX) M
 13 1 RAL M
 14 1 15,CONNEX M
 15 1 CONVERT TO HEX M

(000681) 1

12

MVF
 M101(4),MEXRES
 SET STATUS

LA 1,M101(4)
 SET MCG
 ALLOCATION

LA 2,4
 SET BYTE SIZE

LA 3,M101
 SET BUFFER START

/1R.01

CHART TITLE - 'MONITOR ROUTINE'

CCPSTARTS AND
VARIABLES

```

      .
      | C1
      ...
      .
      | 1.16.
      .
      ... BEGIN
  
```

/ (000724) /

```

      | C2
      ...
      .
      | 1.16.
      .
      ... BEGIN
  
```

/ (000726) /

```

      | C3
      ...
      .
      | 3.15.
      .
      ... STATUS
  
```

/ (000728) /

```

      | 04
      ...
      .
      | 3.15.
      .
      ... STATUS
  
```

/ (000730) /

```

      | C5
      ...
      .
      | 6.05.
      .
      ... RV
  
```

/ (000732) /

```

      | C6
      ...
      .
      | 7.16.
      .
      ... MCST
  
```

/ (000734) /

```

      | 07
      ...
      .
      | 7.10.
      .
      ... MCST
  
```

/ (000736) /

```

      | 08
      ...
      .
      | 8.02.
      .
      ... SOCKET
  
```

/ (000738) /

```

      | 09
      ...
      .
      | 8.02.
      .
      ... SOCKET
  
```

/ (000740) /

```

      | 10
      ...
      .
      | 5.05.
      .
      ... ECMD
  
```

/ (000742) /

```

      | 11
      ...
      .
      | 5.05.
      .
      ... ECMD
  
```

/ (000744) /

```

      | 12
      ...
      .
      | 7.04.
      .
      ... USFB
  
```

/ (000746) /

```

      | 13
      ...
      .
      | 7.04.
      .
      ... USFB
  
```

/ (000748) /

```

      | 14
      ...
      .
      | 11.01.
      .
      ... DISC
  
```

/ (000750) /

```

      | 15
      ...
      .
      | 11.01.
      .
      ... DISC
  
```

/ (000752) /

```

      | 16
      ...
      .
      | 12.01.
      .
      ... EMDS
  
```

/ (000754) /

```

      | 17
      ...
      .
      | 12.01.
      .
      ... EMDS
  
```

/ (000756) /

```

      | 18
      ...
      .
      | 14.01.
      .
      ... NOP
  
```

/ (000758) /

```

      | 19
      ...
      .
      | 14.01.
      .
      ... NOP
  
```

/ (000760) /

```

      | 20
      ...
      .
      | 2.01.
      .
      ... EMUT
  
```

/ (000762) /

```

      | 21
      ...
      .
      | 2.01.
      .
      ... EMUT
  
```

/ (000764) /

```

      | 22
      ...
      .
      | 11.05.
      .
      ... FCB
  
```

/ (000766) /

```

      | 23
      ...
      .
      | 11.05.
      .
      ... FCB
  
```

/ (000768) /

```

      | 24
      ...
      .
      | 14.02.
      .
      ... DFFS
  
```

/ (000770) /

```

      | 25
      ...
      .
      | 14.02.
      .
      ... DFFS
  
```


CHART TITLE - 'MCATTOR ROUTINE'

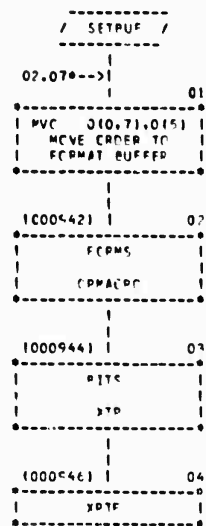


CHART TITLE - EQU STATEMENTS

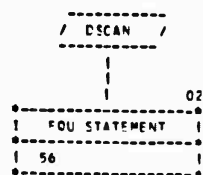
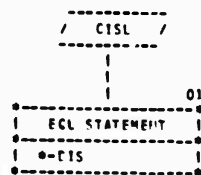


CHART TITLE - CONSTANTS AND STORAGE AREAS

(000055)		CC	AL(1004)	
(000077)		CC	AL(1004)	
(000149)		DC	AL(1004)	
(000221)		DC	AL(1004)	
(000233)		CC	AL(1FILEDD)	
(000236)		DC	AL(1004)	
(000251)		CC	AL(1004)	
(000272)		DC	AL(1FILEDD) FILE FRPDR	
(000282)		CC	AL(1004)	
(000357)	TA	CC	1D*0*	
(000354)	F	CC	1D*0*	
(0004F1)		CC	AL(1004)	
(000557)		CC	AL(1004)	
(000559)		CC	AL(1004)	
(000570)	DEFNCRD	CC	1D*0*	
(000593)	CHARNC	CC	4F*0*	
(000594)	PATT	CC	XLIB*40202C202C202C202C202C212C*	
(000611)	HFXLCC	DC	2F*0*	
(000612)	HXPRES	CC	4F*0*	
(000721)	PARAM	CC	CLB*REGIN*	
(000723)		DC	CLB*B*	
(000725)		CC	CLB*STATUS*	
(000727)		DC	CLB*S*	
(000729)		DC	CLB*R*	
(000731)		CC	CLB*PCST*	
(000733)		CC	CLB*T*	
(000735)		DC	CLB*SOCKET*	
(000737)		CC	CLB*SE*	
(000739)		CC	CLB*ECXO*	
(000741)		DC	CLB*E*	
(000743)		DC	CLB*USER*	
(000745)		CC	CLB*U*	
(000747)		CC	CLB*DISC*	
(000749)		CC	CLB*D*	
(000751)		CC	CLB*FKCS*	
(000753)		CC	CLB*FI*	
(000755)		CC	CLB*ACE*	
(000757)		CC	CLB*N*	
(000759)		CC	CLB*SHUTDOWN*	
(000761)		CC	CLB*M*	
(000763)		CC	CLB*TRAIN*	
(000765)		CC	CLB*DP*	
(000767)		CC	CLB*RESET*	
(000769)		CC	CLB*D*	
(000771)	PARENC	DC	AL(10)	
(000773)	FWSC	DC	CLIB*PARAMETER ERROR *	
(000774)	FEAC	CC	AL(10-EMSC)	

CHART TITLE - CONSTANTS AND STORAGE AREAS

(000776)	CIS	CC	C' CISC MOLE'
(000785)	TUP	CC	C' TIME UP '
(000786)	TIP	CC	00'00'
(000787)		CC	C' CN '
(000788)	EAT	CC	00'00'
(000789)		CC	C' TIME PRINTED '
(000790)	TIMP	CC	00'00'
(000791)	TUPL	CC	AL3(0-TUP)
(000792)	TRVCA	CC	00'00'
(000793)	TRV	CC	C' TCTAL RV ENTRIES, '
(000794)	TMESS	CC	00'00'
(000795)		CC	C' TCTAL MESSAGES, '
(000796)	TBITS	CC	100'00'
(000797)		CC	C' TCTAL BITS, '
(000798)	TRVL	CC	AL3(0-TRVEN)
(000801)	TRCE	CC	00'00'
(000802)	TRC	CC	C' CURRENT ENTRIES, '
(000803)	TRCL	CC	00'00'
(000804)		CC	C' PARTIAL CLCSES, '
(000805)	TROP	CC	00'00'
(000806)		CC	C' PARTIAL CREAS, '
(000807)	TRCEL	CC	AL3(0-TRCE)
(000810)	MUIF	CC	00'00',C' '
(000811)	PLSC1	CC	20'00',C' '
(000812)	PLSC2	CC	40'00',C' '
(000813)	PLSC3	CC	20'00',C' '
(000814)	PHFD	CC	20'00',C' '
(000815)	PFSC1	CC	20'00',C' '
(000816)	PFSC2	CC	40'00',C' '
(000817)	PFSC3	CC	20'00',C' '
(000818)	PLIA	CC	40'00',C' '
(000819)	PSTAT	CC	40'00',C' '
(000820)	PMALL	CC	00'00',C' '
(000821)	PMALL	CC	00'00',C' '
(000822)	PMES	CC	00'00',C' '
(000823)	PMIT	CC	00'00',C' '
(000824)	PMYS	CC	00'00',C' '
(000825)	PMIP1	CC	00'00',C' '
(000826)	PMIP2	CC	00'00'
(000827)	PMAPV	CC	AL3(0-PMIP)
(000828)	ACTIP	CC	C'00:00:00'
(000830)	PMAC	CC	C'USER-ID L-SOCKET HOST F-SOCKET LIAH STAT'
(000831)		CC	C' MSGALLCC RITALLCC MSGCTAL RITCTAL RYTES17F'
(000832)		CC	C' TIME1 TIME2 '
(000833)	HEADEND	CC	AL3(0-HEAD)
(000834)	ACUSER	CC	C'AC RV ENTRY FCUAL'
(000835)	ACLSEN	CC	AL3(0-ACUSER)

CHART TITLE - CONSTANTS AND STORAGE AREAS

1000036)	FILMSG	CC	C'DISK FILE ERROR	
1000037)	FILML	CC	AL3(0-FILMSG)	
1000038)	PNK	CC	C'HOST NOT KNOWN	
1000039)	PARK	CC	AL3(0-PARK)	
1000040)	NFS	CC	C'INSUFFICIENT FREE STORAGE	
1000041)	NFSL	CC	AL3(0-NFS)	
1000042)	AMEC	CC	C'ECHO REPLY ACCEPTED	
1000043)	AMECL	CC	(0-AMEC)	
1000044)	PADECO	CC	C'ECHO FAILED	
1000045)	PADECL	CC	AL3(0-PADECO)	
1000046)	CEEC	CC	C'ECHO COMPLETE	
1000047)	CODEEND	CC	AL3(0-GOFCC)	
1000049)	NAME	CC	CLB'NAME	NAME OF HOST
1000050)		CC	CL2	
1000051)	STAT1	CC	CLB'STATE	STATE OF FIRST HOST
1000052)		CC	CL2	
1000053)	STAT2	CC	CLB'STATE	STATE OF SECOND HOST
1000054)		CC	CL2	
1000055)	STAT3	CC	CLB'STATE	STATE OF THIRD HOST
1000056)	NAMEND	CC	AL3(0-NAME)	
1000058)	TYPEIT	CC	CLB'TYPEIT	
1000059)		CC	AL1(1)	
1000060)	MESS	CC	AL3(0-0)	
1000061)		CC	C'X	
1000062)	LEAD	CC	AL3(0-0)	
1000064)	WRE	CC	CLB'WAITRD	
1000065)		CC	AL1(1)	
1000066)		CC	AL3(1-PUT)	
1000067)		CC	C'U	
1000068)	RYTE	CC	AL3(0-0)	
1000071)	FILLIST	CC	CLB'WRDUF	
1000072)	FILNAM	CC	CLB'DEFALLT	
1000073)	FILTYP	CC	CLB'DRV	
1000074)		CC	CL2'DI	
1000075)		CC	H'0	
1000076)	FILLAC	CC	AL4(0-0)	
1000077)		CC	H'106	
1000078)		CC	CL2'0	
1000079)		CC	H'0	
1000080)	FILFLT	CC	CLB'LCFDSW	
1000081)	FENCE	CC	2F'1	
1000082)	LEFEP	CC	2F'0	
1000083)	ALL	CC	1F'0	
1000084)	SAVE	CC	1F'0	
1000085)	MESSAV	CC	24F'0	
1000086)	LEASAV	CC	1F'0	
1000087)	WARR	CC	1F'0	

CHART TITLE - CONSTANTS AND STORAGE AREAS

(J00852)	BUFF	CC	CL106°	
(000854)	CHECK	DC	1F°0°	
(000857)	ECCLAT	DC	1F°0°	
(000858)	INPUT	CC	24F°0°	
(000855)	TEMP	DC	1F°0°	
(000856)	PCRACT	CC	1F°0°	
(J00901)	PCRS12	CC	1F°0°	
(000905)	TRYAR	CC	C°01224567F°ABCDEF°	
(000909)	WSTEL	CC	CLB°	JW
(J00910)		CC	CLB°UCLA°	JW
(000911)		DC	CLB°SR1°	JW
(000912)		CC	CLB°UCSD°	JW
(J00913)		CC	CLB°UTAH°	JW
(000914)		DC	CLB°dRN°	JW
(000915)		CC	CLB°MIT°	JW
(J00916)		CC	CLB°RANC°	JW
(000917)		DC	CLB°SDC°	JW
(000918)		CC	CLB°HARVARD°	JW
(J00919)		CC	CLB°LINCINN°	JW
(000920)		DC	CLB°STANFORD°	JW
(000921)		CC	CLB°ILLIAC°	JW
(J00922)		CC	CLB°CASE°	JW
(000923)		DC	CLB°CARNEGIE°	JW
(000924)		CC	CLB°PACLT°	JW
(000925)		CC	CLB°APES°	JW
(J00926)		CC	CLB°MITR°	JW
(000927)		DC	CLB°RADC°	JW
(000928)		CC	CLB°RES°	JW
(000929)		CC	CLB°EAC°	JW
(000930)		CC	CLB°TIANFR°	JW
(000931)		CC	CLB°PTELLAN°	JW
(000932)		CC	CLB°USC°	JW
(000933)		CC	CLB°GWC°	JW
(000934)		CC	CLB°ACBR°	JW
(J00935)		CC	CLB°	DUMMY JW
(000936)		CC	CLB°	DUMMY JW
(000937)		CC	CLB°	DUMMY JW
(000938)		CC	CLB°	DUMMY JW
(000939)		CC	CLB°RRH/TIE°	JW
(000940)		CC	CLB°	DUMMY JW

CHART TITLE - 'LOGGER CONTROL ROUTINE'

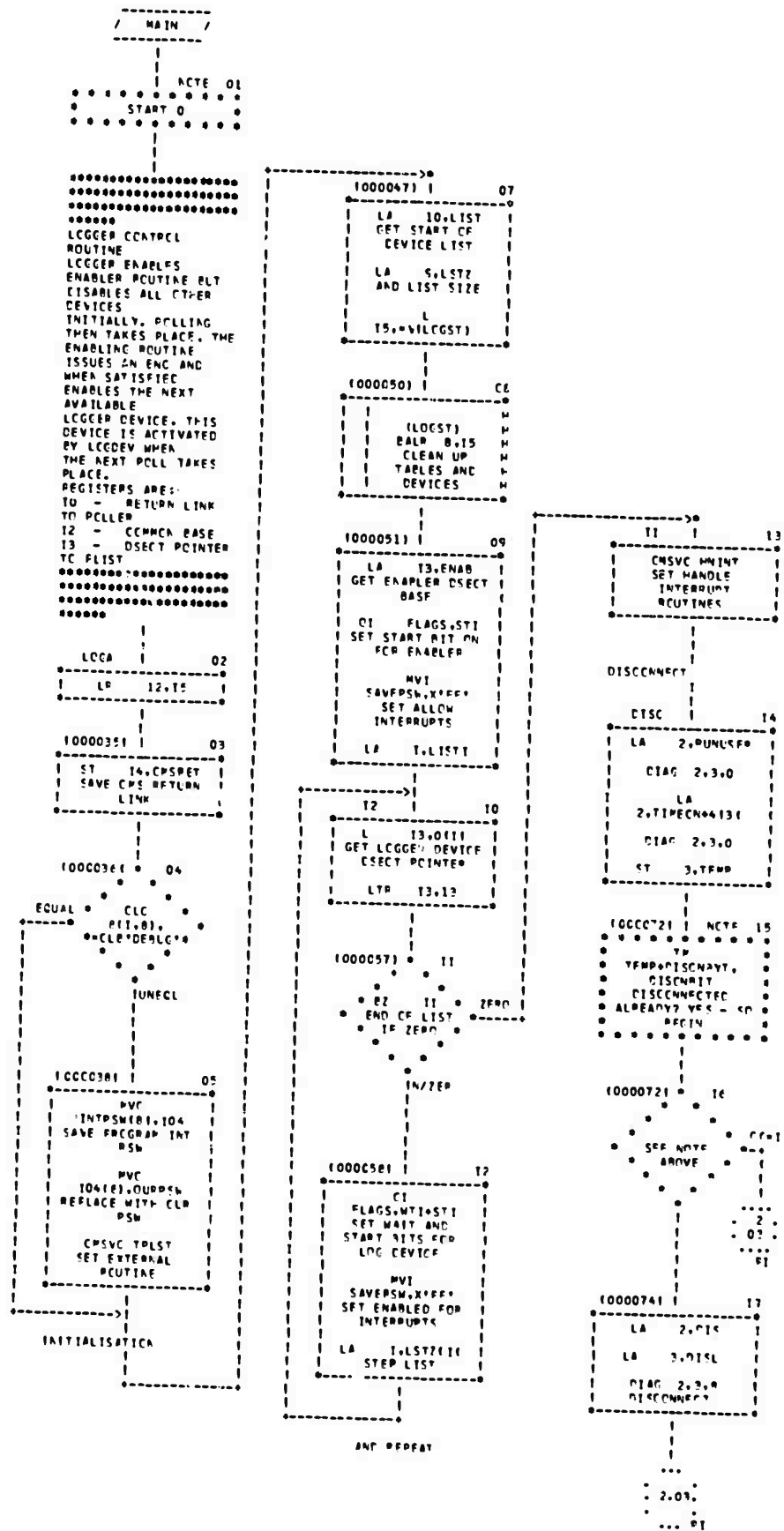


CHART TITLE - 'LOGGER CONTROL ROUTINE'

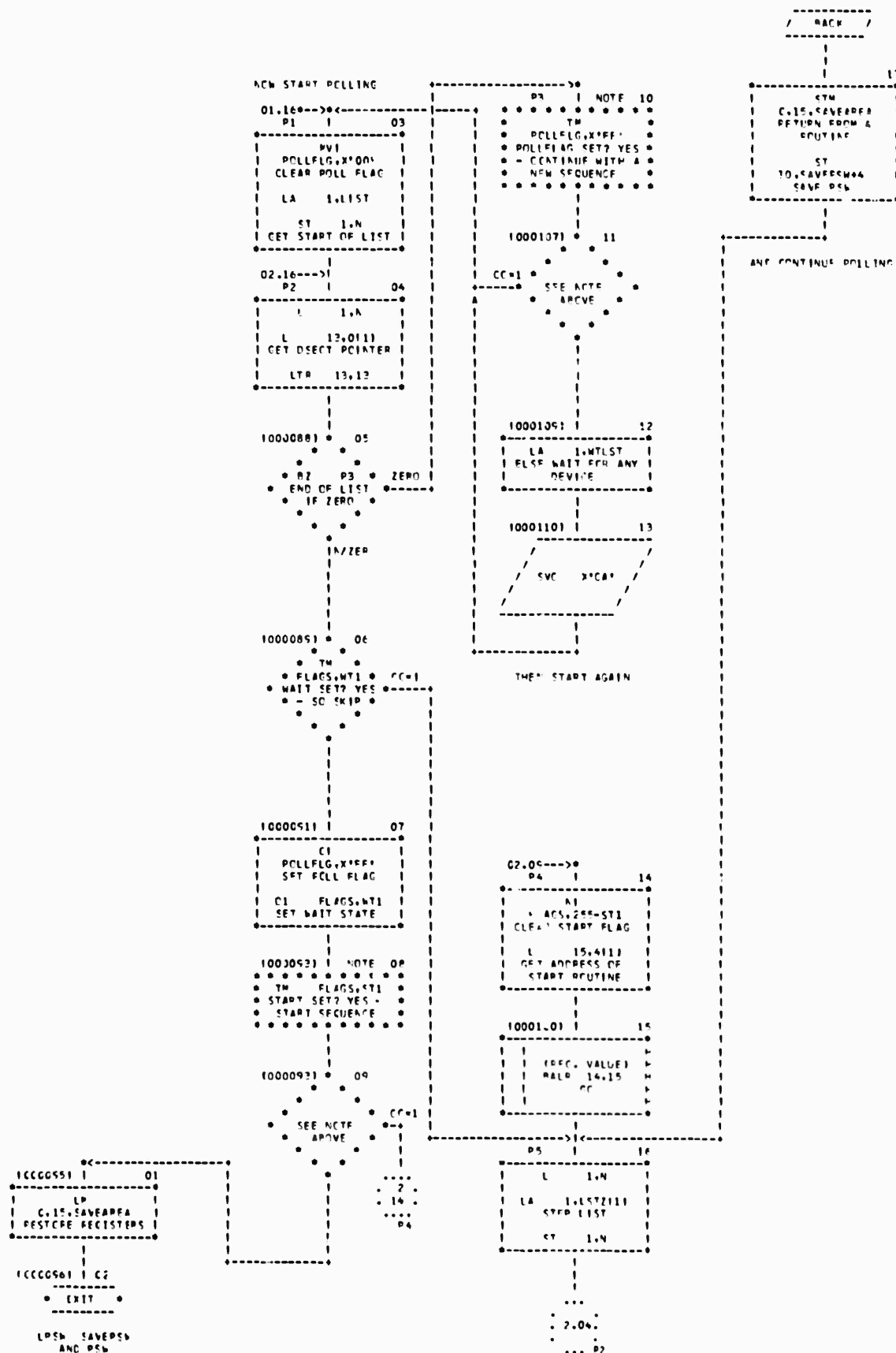


CHART TITLE - 'LOGGER CONTROL ROUTINE'

ENABLING ROUTINE

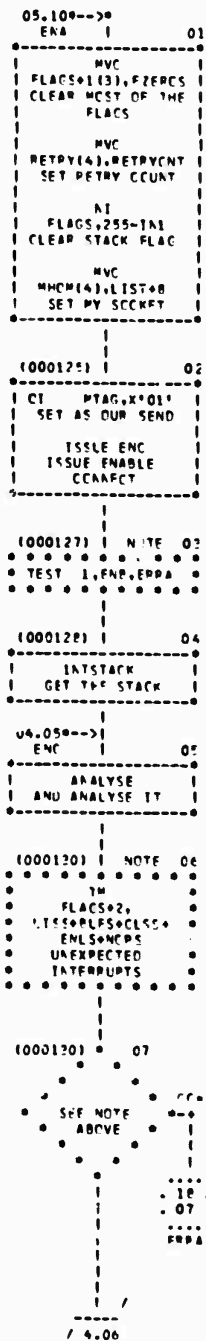


CHART TITLE - 'LOGGER CONTROL ROUTINE'

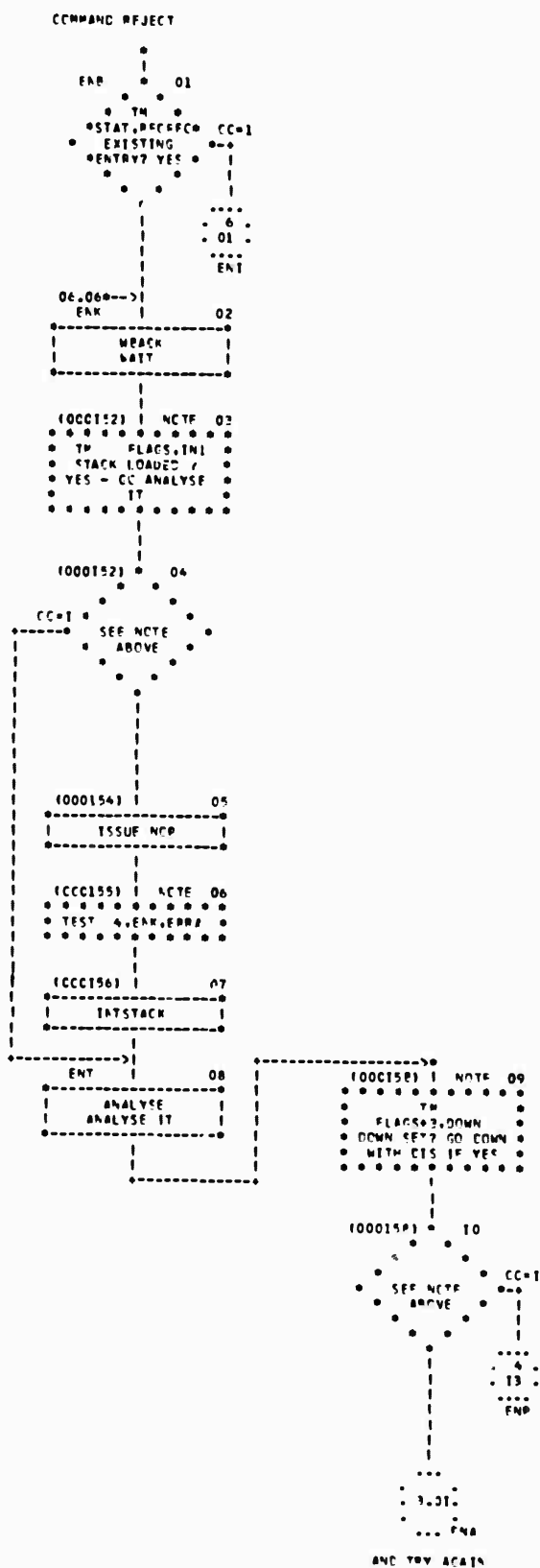


CHART TITLE - 'LOGGER CONTROL ROUTINE'

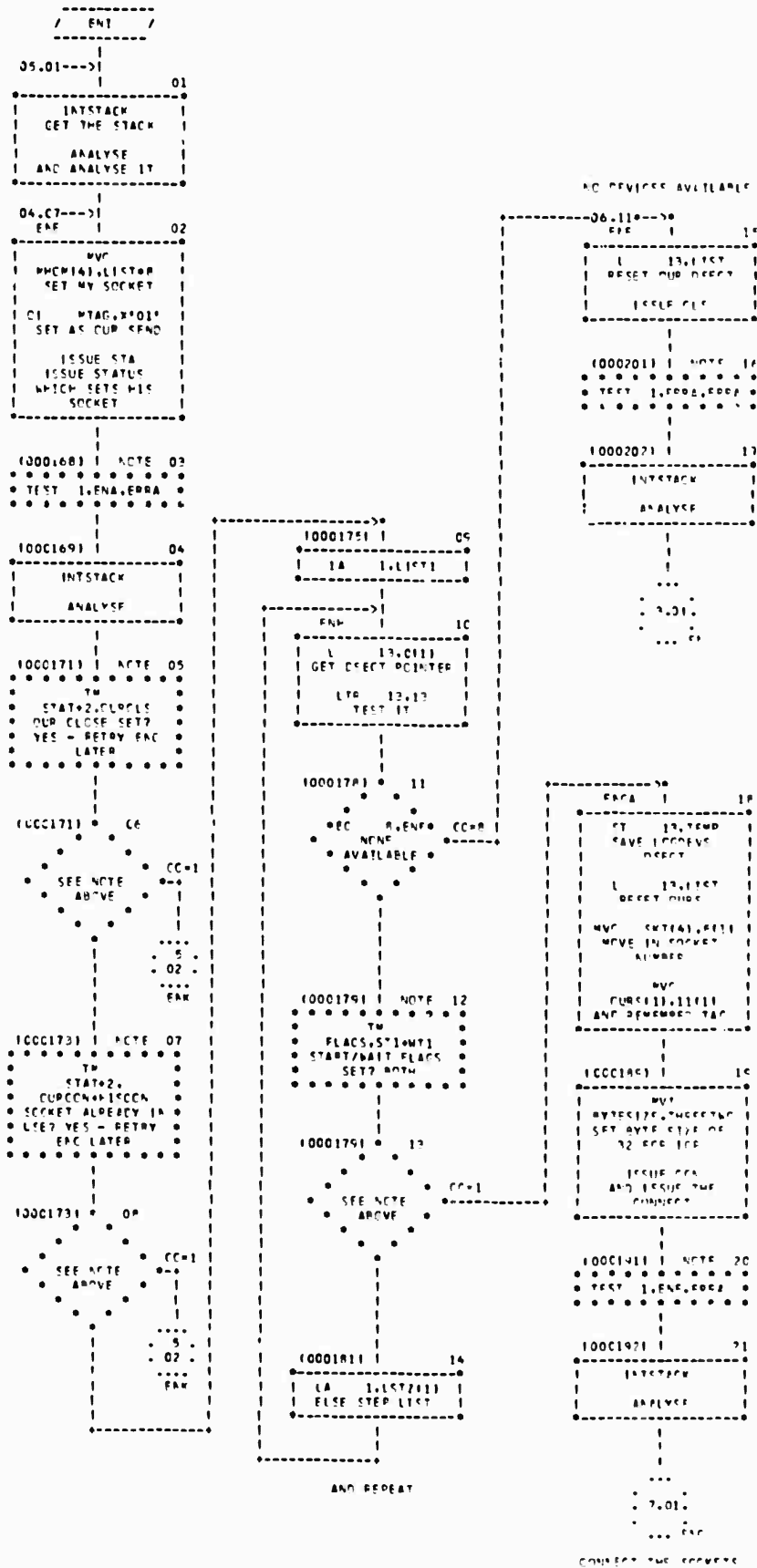


CHART TITLE - 'LCCGER CONTROL ROUTINE'

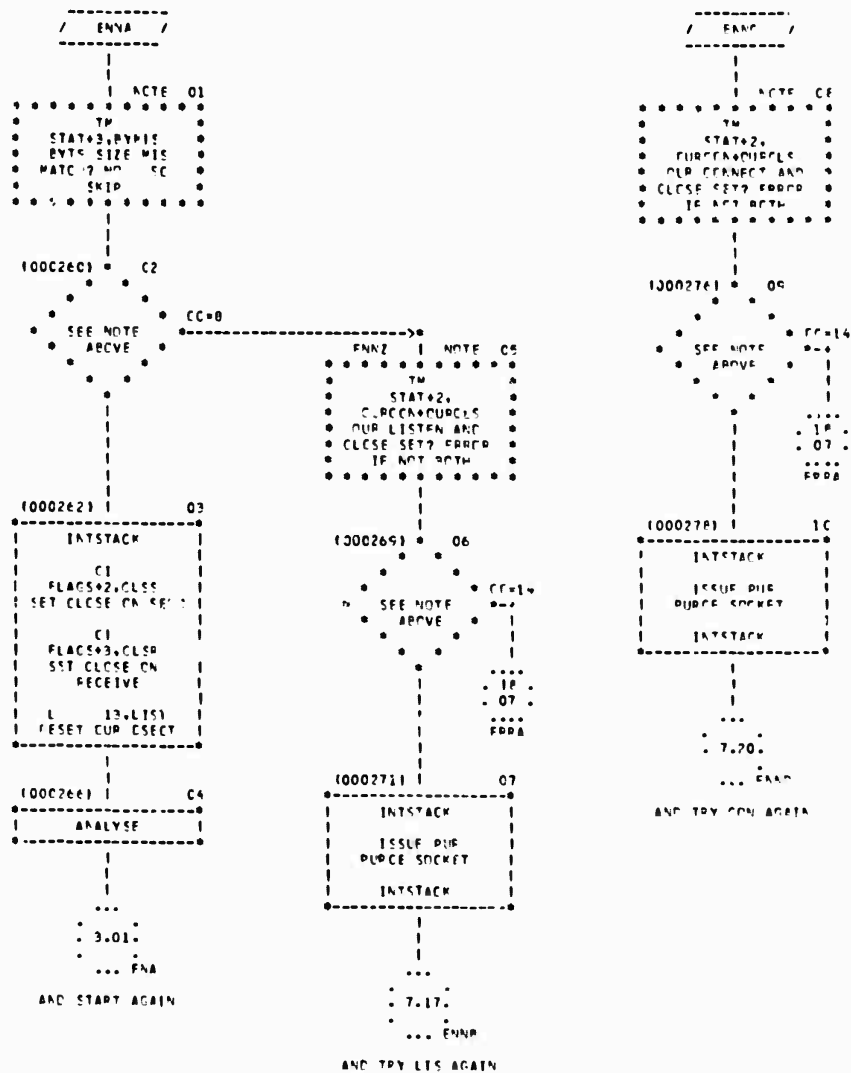


CHART TITLE - 'LOGGER CONTROL ROUTINE'

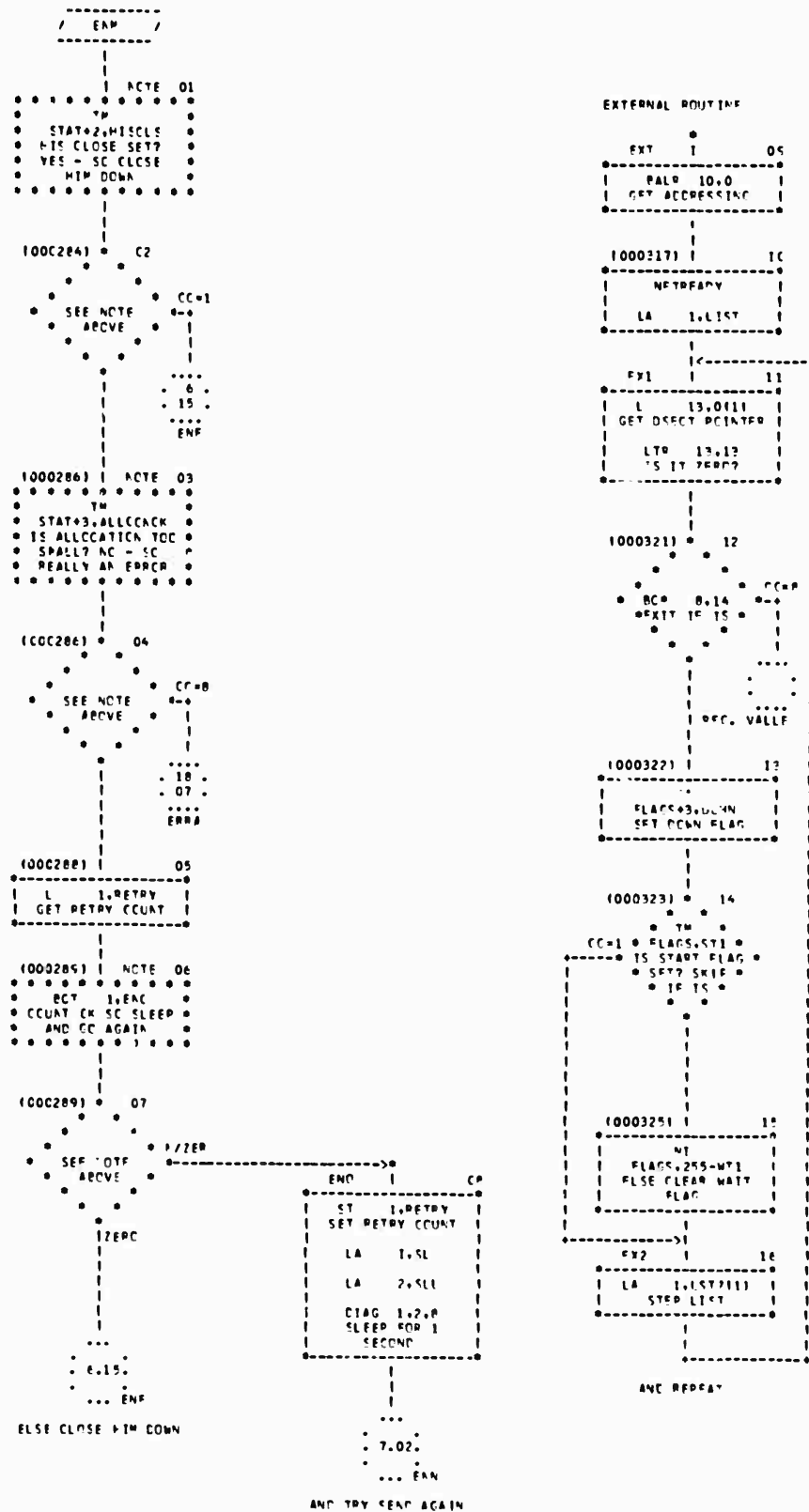


CHART TITLE - 'LOGGER CONTROL ROUTINE'

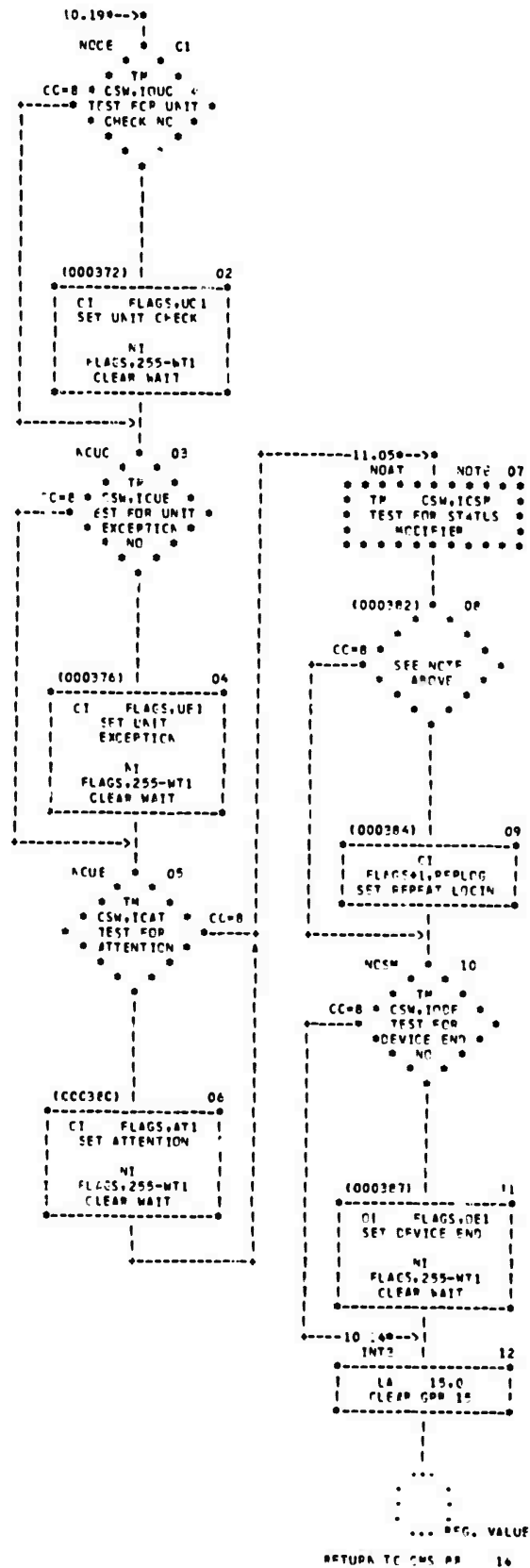


CHART TITLE - 'LOGGER CONTROL ROUTINE'

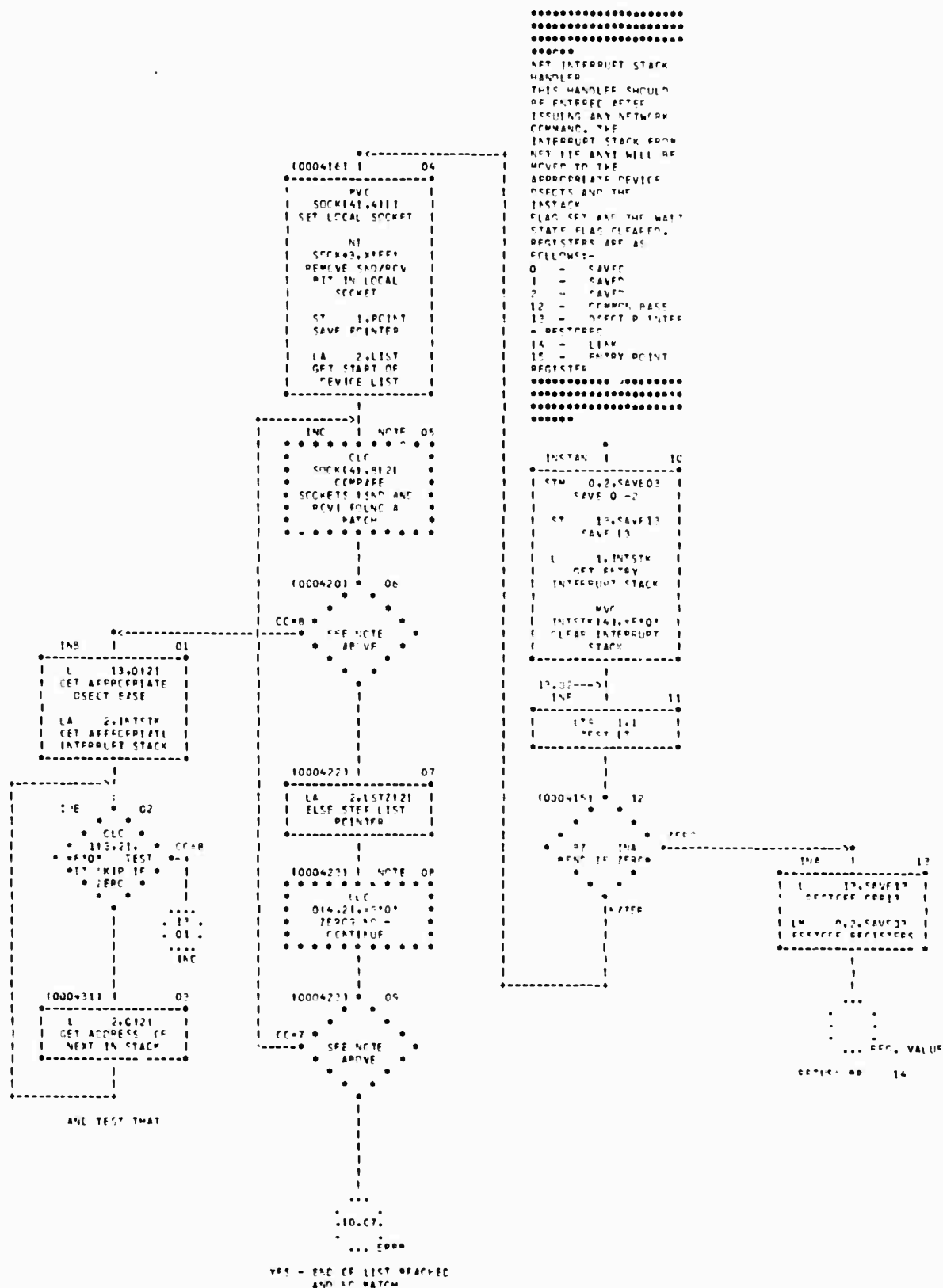
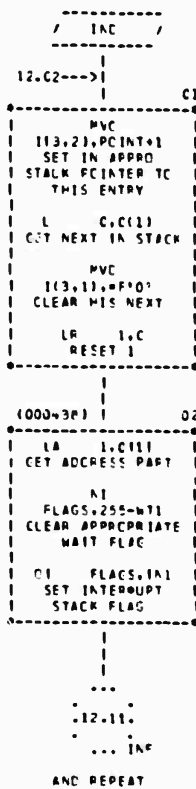
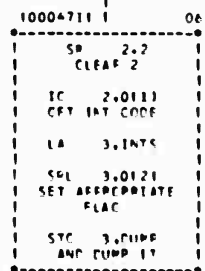
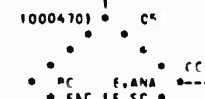
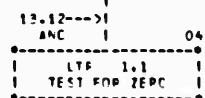
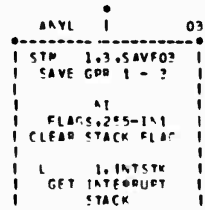


CHART TITLE - 'LCGGER CONTRL RELTAE'



ANALYSE INTERRUPT
STACK
THIS ROUTINE SHOULD
BE CALLED AFTER
INTSTACK AND WRACK TO
OBTAIN THE INTERRUPT
INFORMATION IN FLAGS.
THE STACK IS FREED
THROUGH FREEPAIN.
REGISTERS ARE AS
FOLLOWS:-
1 - SAVED
2 - SAVED
3 - SAVED
12 - COMMON BASE
13 - EXECUT POINT
14 - LINK
15 - ENTRY PCINT
REGISTER



REG. VALUE

AND RETURN RO 14

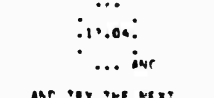
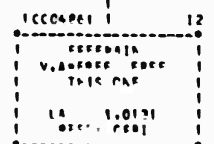
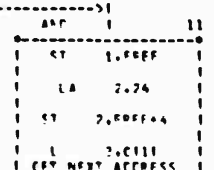
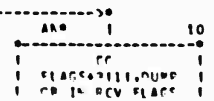
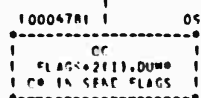
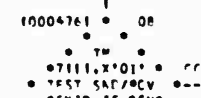


CHART TITLE - 'LOGGER CONTROL ROUTINE'

CONVERT TO EBCDIC
 ROUTINE
 CONVERTS BYTES FROM
 ASCII TO EBCDIC.
 BUFFER TO BE
 CONVERTED IS ALWAYS
 PCVBUF AND THE NUMBER
 OF BYTES IS GIVEN IN
 CC=BYTES.

ROUTINE ALSO REPLACES
 CARRIAGE RETURN/ LINE
 FEED SEQUENCE
 WITH NEWLINE/ FEED
 (LF) CODES. THE LF
 CODE IS ACT. CARRIED ON
 BY THE LOGGR WHEN
 PRECEDED BY NEWLINE.
 IF CARRIAGE RETURN
 OCCURS AS THE LAST
 CHARACTER OF THE NET
 BUFFER THEN CR FLAG
 IS SET IN PLACS AND
 CLBYTES.

IS DECREMENTED BY 1.
 IF CR FLAG IS FOUND
 SET, FIRST BYTE IS
 TESTED FOR LINE FEED
 AND CR FLAG CLEARED.
 IF LINE FEED IS THEN
 FOUND IT IS REPLACED
 BY NEWLINE. IF NOT,
 ACTCR FLAG IS SET IN
 PLACS.

REGISTERS ARE AS
 FOLLOWS:-

1 - SAVED
 2 - SAVED
 3 - SAVED
 12 - COMMON BASE
 13 - CSECT POINTER
 14 - SAVED
 15 - ENTRY POINT
 REGISTER

TECDDIC ACTE 01
 CLC
 CURBYTES(2),
 ZERCS TEST
 CLBYTES FOR ZERCS
 BCR 12,14
 RETURN IF NO
 BYTES

10005231 C2

SEE NOTE ABOVE

REG. VALUE

10005251 03

STP 1,4,SAVED3
 ELSE SAVE 1 - 4
 ST 13,SAVE13
 AND 12

10005271 NOTE 04
 CLC
 TXCCEVERCODE
 IS IT EBCDIC ?
 YES - CC SQUEZE
 CUT 1CLFS

10005271 05

SEE NOTE ABOVE

10005291 06
 MVI
 TPL=CC*256
 SET TOT TABLE TO
 LOCK FOR CR

LM 2,CLBYTES
 GET NUMBER OF
 BYTES
 LA 3,256
 SET MAXIMUM
 LENGTH

10005311 07
 S 2,CC*256
 SUBTRACT 256

10005331 08
 PC
 12,TECDDIC
 BRANCH IF <0
 CCR = 0

10005341 09
 IF 1 (TOTAL)
 IF 1 EX 2,TOTAL
 IF 1 TRANSLATE 256
 IF 1 BYTES

10005351 10
 LA 12,256(13)
 UPDATE CSECT
 POINTER

AND REPEAT

10005361 11
 A 2,CC*256
 BY REMAINDER - 1

10005391 12
 IF 1 (TOTAL)
 IF 1 EX 2,TOTAL
 IF 1 AND TRANSLATE
 IF 1 THAT

10005401 13
 L 13,SAVE13
 RESTORE CSECT
 POINTER

10005411 14
 MVI
 CC=12
 CC FLAG SET?
 SKIP IF NOT

10005431 15
 A1
 CLASS=1,255-CR
 CLEAR CR FLAG

10005441 NOTE 16
 CLC
 PCVBUF,LF
 IS FIRST A LINE
 FEED? BRANCH IF
 NOT

10005441 17
 SEE NOTE ABOVE

10005461 18
 MVI PCVBUF,HL
 FILE REPLACE WITH
 NEWLINE

AND CONTINUE AS FOR NEXT

10005471 19
 CT
 CLASS=1,255
 KEY APPD - 18

10005481 20
 IF 1,13
 SAVE CSECT
 POINTER
 LM 4,CLBYTES
 GET NUMBER OF
 BYTES

10005491 21
 C 4,CC*256
 SUBTRACT 256

10005511 22
 MVI
 12,TECDDIC
 BRANCH IF <0
 CCR = 0

10005541 23
 LA 3,256
 SET MAXIMUM
 SEARCH LENGTH

10005551 24
 IF 1,04
 TECDDIC
 IF 1 (TOTAL)
 IF 1 EX 2,TECDDIC
 IF 1 SEARCH FOR
 IF 1 CARRIAGE
 IF 1 RETURN

10005561 25
 MVI
 7,TECDDIC
 BRANCH IF <0
 CCR = 0

10005571 26
 IF 1,255(13)
 STP PCVBUF
 CSECT FOR BLOCK
 IF 1,13
 SET CASE 13

AND 0 READY SEARCH

CHART TITLE - 'LOGGER CONTROL RELTINE'

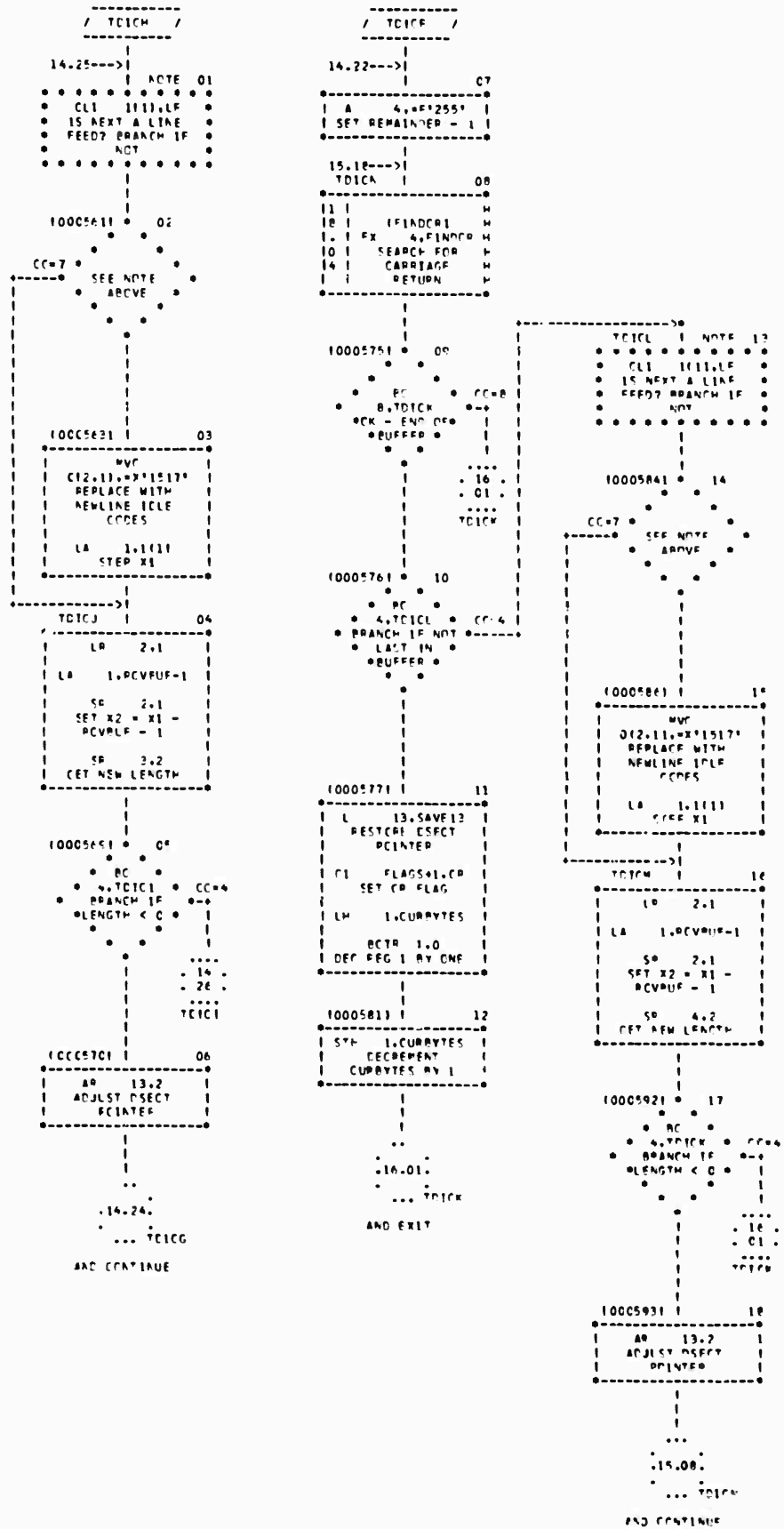


CHART TITLE - 'LOGGER CONTROL ROUTINE'

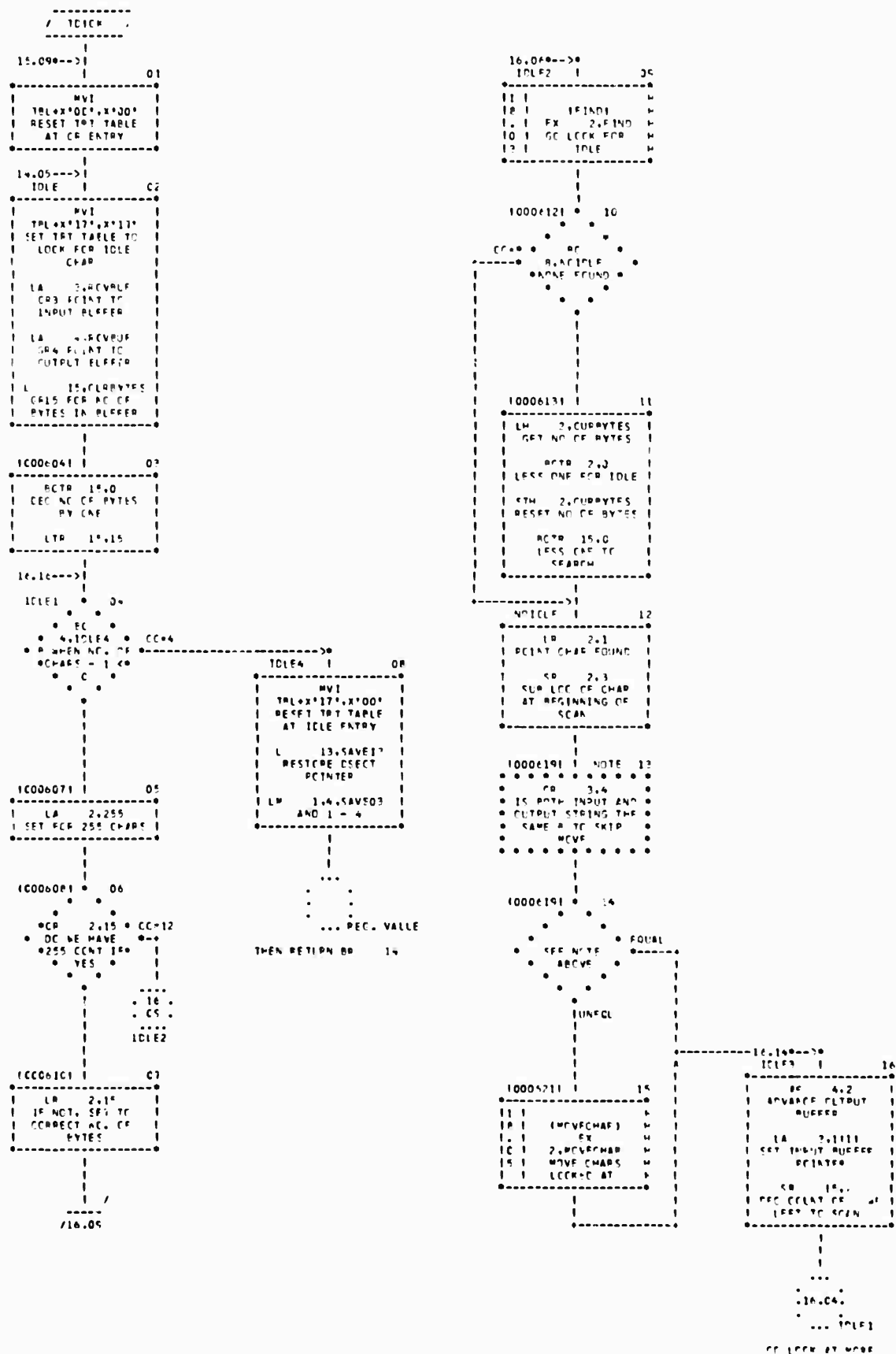


CHART TITLE - 'LCCER CONTROL ROUTINE'

CONVERT FROM EBCDIC
 RELTIME
 CONVERTS BYTES FROM
 EBCDIC TO ASCII.
 BUFFER TO BE
 CONVERTED IS ALWAYS
 CBUF00 AND THE NUMBER
 OF BYTES TO BE
 TRANSLATED IS ALWAYS
 132.
 RELTIME ALSO REPLACES
 NEWLINE CODE FIRST
 WITH X'FF' AND THEN
 WITH CARRIAGE RETURN
 AND LINE FEED CODES
 AND ADJUSTS BITCOUNT
 ACCORDINGLY.
 REGISTERS ARE AS
 FOLLOWS:-

1 - ADDRESS OF
 NEWLINE CODE IN TRT
 INSTRUCTION
 2 - LENGTH TO BE
 MOVED FROM CP TO TEMP
 BUFFER
 3 - CP BUFFER
 POINTER
 4 - TEMPORARY
 BUFFER POINTER
 12 - COMMON BASE
 13 - CSECT POINTER
 - SAVED
 14 - LINK
 15 - ENTRY
 REGISTER & LENGTH TO
 BE TESTED BY TRT

FREDDIC NOTE 71
 CLT
 TACODE, EBCDIC
 IS IT EBCDIC? BCR
 0,14
 YES - RETURN
 WITHOUT
 CONVERSION

1000655 02
 SEE NOTE
 ABOVE
 REG. VALIF

1000657 02
 STM 1,4,SAVEC3
 SAVE 1 - 4
 MVI
 TRL0,FF,FF,FF
 SET TRT TABLE TO
 LCCR FOR ASCII
 NEWLINE

/17.08

1000671 04
 11 1
 18 1 (MOVECHAR) M
 1 1 EX
 10 1 2,MOVECHAR M
 15 1 MOVE ALL UP TO
 1 NEWLINE M

1000672 06
 AD 4,2
 STFF TEMPORARY
 BUFFER
 PVC
 0(2,4),XL2,00DA
 SET CP LF
 LA 4,2141
 STEP TEMPORARY
 BUFFER
 LA 3,1111
 STEP CP BUFFER

1000676 06
 LM 1,PITCNT
 LA 1,0111
 STEP BIT COUNT
 STM 1,PITCNT
 SP 15,2
 PCTR 15,0
 DEC LENGTH BY ONE
 AND RESET

1000681 07
 LTR 15,15

AND REPEAT

17.03--30
 1000659 1 OR
 11 1
 18 1 (TRT,LOI) M
 1 1 EX 0,TOTAL) M
 10 1 TRANSLATE 132 M
 12 1 BYTES M

1000660 06
 LA 3,CBUF00
 ELSE GET START CP
 BUFFER
 LA 4,TEMPBUF
 SET START
 TEMPORARY BUFFER
 LM 15,PITCNT
 GET BIT COUNT
 SRL 15,3
 CONVERT TO BYTES
 PCTR 15,0
 DECREMENT BY 1
 (LENGTH)

1000665 10
 LTR 15,15

1000666 11
 ORC 4,FB00 CCR
 BRANCH IF 15
 < 0

1000667 12
 11 1
 18 1 (FINCI) M
 1 1 EX 15,FIND M
 10 1 LOOK FOR A M
 13 1 NEWLINE M

1000668 13
 ORC 8,FB00 CCR
 BRANCH IF END

1000669 14
 LR 2,1
 SR 2,3
 GET LENGTH

1000670 15
 11 1
 18 1 (MOVECHAR) M
 1 1 EX M
 10 1 1,MOVECHAR M
 13 1 MOVE THE
 REMAINDER M

1000671 16
 (CORRECT),
 TEMPORARY COPY
 THE BUFFER PATH
 MVI
 TRL0,FF,FF,FF
 RESET TRT TABLE
 ENTRY AT ASCII
 NEWLINE
 LM 1,4,SAVEC3
 RESET OFFIC-POC

...
 ... REG. VALUE
 AND OFF(0A 00 14

CHART TITLE - EQU STATEMENTS

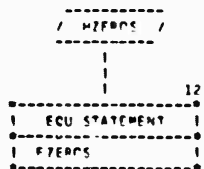
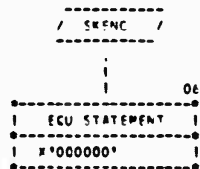
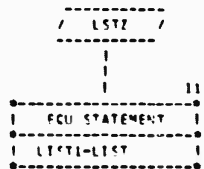
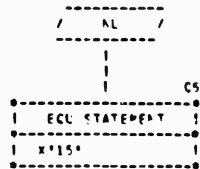
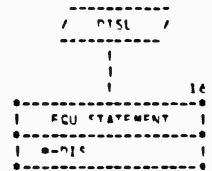
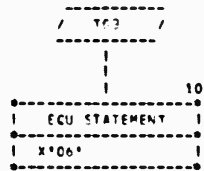
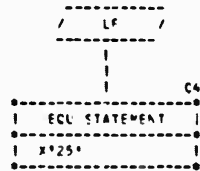
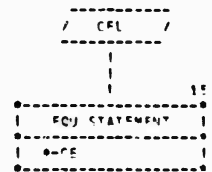
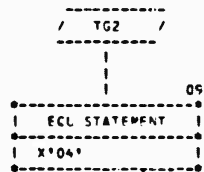
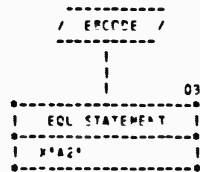
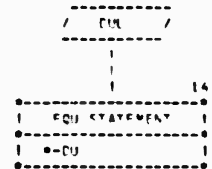
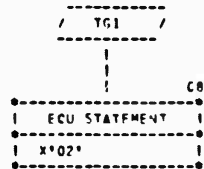
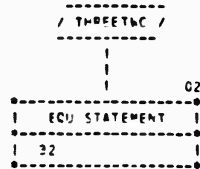
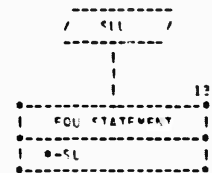
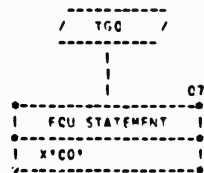
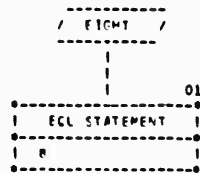


CHART TITLE - CONSTANTS AND STORAGE AREAS

(OCC111)	CC	AL4(0*4)	
(J00657)	CC	XL16*00010203372F2E2F1605250P0F0DCECF*	0
(J00658)	CC	XL16*101112133C30322618193F271C1C1E1F*	1
(OCC659)	CC	XL16*4C5A7F7P5E6C507C4DC5C4E6P604P61*	2
(OCC700)	CC	XL16*F0F1F2F3F4F5F6F7F8F9FAF4C7F6E6F*	3
(OCC701)	CC	XL16*70C1C2C3C4C5C6C7C8C9C0C2C3C4C5C6*	4
(OCC702)	CC	XL16*070P0C5E2E3E4E5E6F7E8F9AC4ABC716F*	5
(OCC703)	CC	XL16*79C18283848586878889919293949596*	6
(OCC704)	CC	XL16*575P5C82A7A4A5A6A7A8A9EB4F5E5FC7*	7
(OCC705)	CC	XL16*803E17142724171717171717171717*	8
(OCC706)	CC	XL16*171717171717171717171717171717*	9
(OCC707)	CC	XL16*171717171717171717171717171717*	A
(OCC708)	CC	XL16*171717171717171717171717171717*	
(OCC709)	CC	XL16*171717171717171717171717171717*	
(OCC710)	CC	XL16*171717171717171717171717171717*	
(OCC711)	CC	XL16*171717171717171717171717171717*	
(OCC712)	CC	XL16*171717171717171717171717171717*	F
(OCC722)	CC	XL16*00C1C2C3C4C5C6C7C8C9C0C2C3C4C5C6*	0
(OCC723)	CC	XL16*101112133E3FFCE821E1582821C1C1E1F*	1
(OCC724)	CC	XL16*82E28284858A171P8282828282828282*	2
(OCC725)	CC	XL16*82E216E2828282828282828282821415821A*	3
(OCC726)	CC	XL16*20E282828282828282828282828282827*	4
(OCC727)	CC	XL16*26E282828282828282828282828282827*	5
(OCC728)	CC	XL16*20E282828282828282828282828282827*	6
(OCC729)	CC	XL16*E28282828282828282828282828282827*	7
(OCC730)	CC	XL16*82E28282828282828282828282828282*	8
(OCC731)	CC	XL16*82E28282828282828282828282828282*	9
(OCC732)	CC	XL16*82E28282828282828282828282828282*	A
(OCC733)	CC	XL16*82E28282828282828282828282828282*	
(OCC734)	CC	XL16*82E28282828282828282828282828282*	
(OCC735)	CC	XL16*82E28282828282828282828282828282*	
(OCC736)	CC	XL16*82E28282828282828282828282828282*	
(OCC737)	CC	XL16*82E28282828282828282828282828282*	F
(OCC746)	CC	XL16*82E28282828282828282828282828282*	
(OCC751)	CMSET	DS	1
(OCC752)	A	DS	1F
(OCC753)	FOLLOW	CC	1F*
(OCC754)	CSW	DS	1F
(OCC755)	CUMF	DS	1F
(OCC756)	SAVEC2	DS	4F
(OCC757)	SAVE12	DS	F
(OCC758)	PCINT	DS	F
(OCC759)	FREE	DS	10
(OCC760)	TEMP	DS	1F
(OCC761)	SCCH	DS	1F
(OCC762)	ICPSCCH	DS	1F
(OCC763)	TRACE	CC	1F*

CHART TITLE - CONSTANTS AND STORAGE AREAS

(000764)	CRASH-SAV	DS	16F
(000765)	RETRY	DS	1F
(000766)	RETRYCNT	DS	F*5*
(000767)	TEMPLE	DS	64F
(000773)	PAINT	DC	CL8*PAINT* HANDLE INTERRUPT ROUTINE
(000774)		DC	CL4*SET*
(000775)		DC	CL4*VCC*,AL4*INTER,XL2*00FC*,CL2*AK*
(000776)		DC	CL4*LCC1*,AL4*INTER,XL2*0046*,CL2*AK*
(000777)		DC	CL4*LCG2*,AL4*INTER,XL2*0045*,CL2*AK*
(000778)		DC	CL4*LCG3*,AL4*INTER,XL2*0046*,CL2*AK*
(000779)		CC	F*-1*
(000784)	WTLST	DC	CL8*WAIT*
(000785)		DC	CL4*RDRI*
(000786)		DC	CL4*LCC1*
(000787)		DC	CL4*LCG2*
(000788)		DC	CL4*LCG3*
(000789)		CC	1F*0*
(000790)	INTEEV	CC	1F*0*
(000792)	TPLEST	CC	CL8*TPAP*
(000793)		CC	A*EXT*
(000806)	L*ST	CC	XL1*0C*,AL3*ENAB*,V*ENAB*,AL3*SKFNC*,AL1*TG0*
(000807)	L*ST1	CC	XL1*4A*,AL3*LCC1*,V*LCGCEV*,AL3*SKFNC*,AL1*TC1*
(000808)		CC	XL1*45*,AL3*LCC2*,V*LCGCEV*,AL3*SKFNC*,AL1*TC2*
(000809)		CC	XL1*46*,AL3*LCC3*,V*LCGCEV*,AL3*SKFNC*,AL1*TC3*
(000813)	FZERCS	CC	1F*0*
(000815)	SKT	CC	1F*0*
(000816)	*SKT	CC	XL2*((10-SKT)*00)
(000817)	CURS	CC	XL1*CC*
(000818)	RYTES	CC	3F
(000821)	CURPSW	CC	XL4*01040000*
(000822)		DC	AL4*CRASH*
(000824)	FINTPSW	CC	1C
(000826)	SL	CC	C*SL 1*
(000828)	CU	DC	C*DU 12C00-3C0C0*
(000830)	CE	CC	C*CE E*
(000832)	CIS	CC	C*CTSC *CLC*
(000870)	ENAB	DC	(S12A)*F*0*
(000880)	LCG1	CC	(S12B)*F*0*
(000882)	LCG2	CC	(S12B)*F*0*
(000884)	LCG3	CC	(S12B)*F*0*

CHART TIT. - 'LCCGER DEVICE CONTROL ROUTINE'

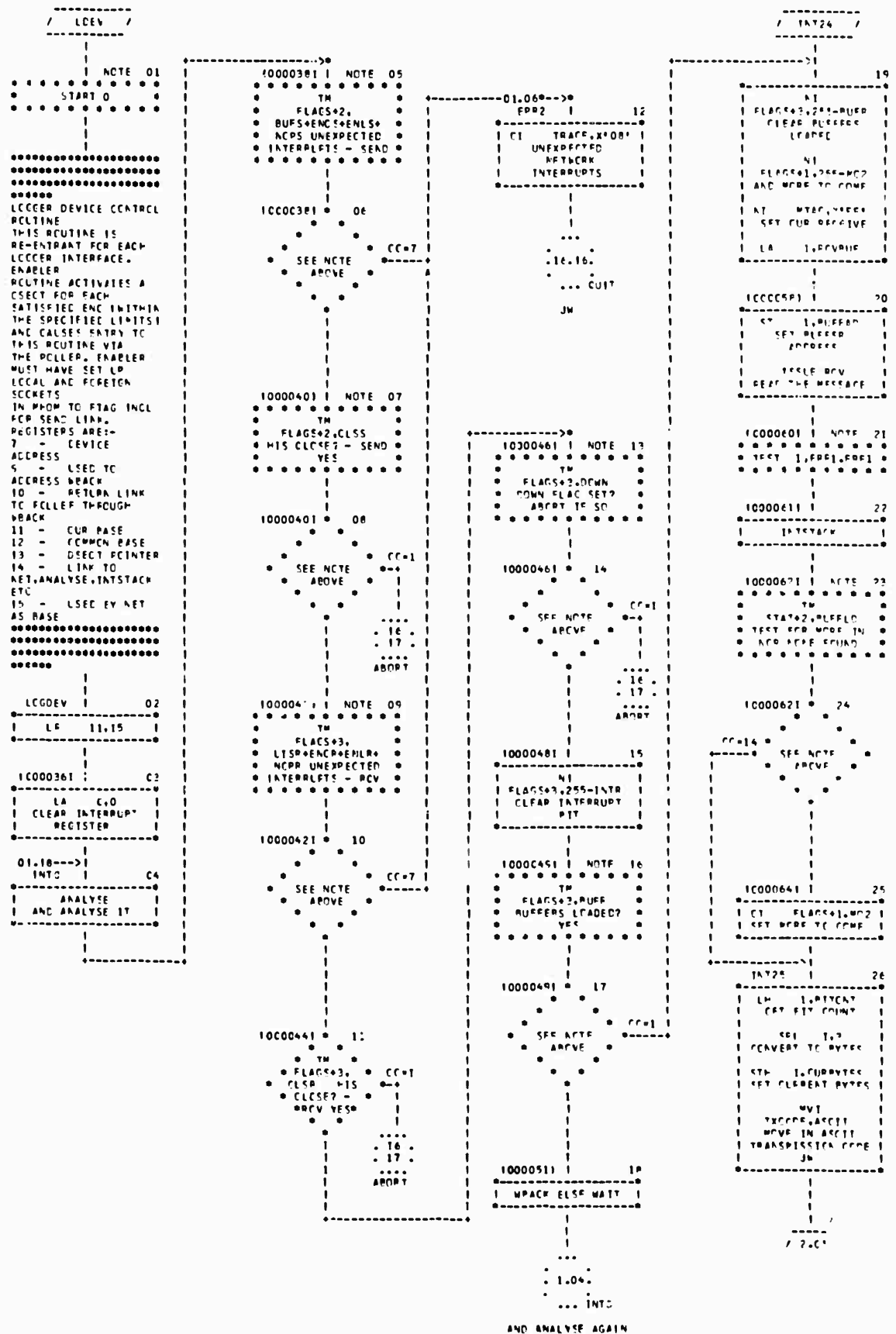


CHART TITLE - 'LOGGER DEVICE CONTROL ROUTINE'

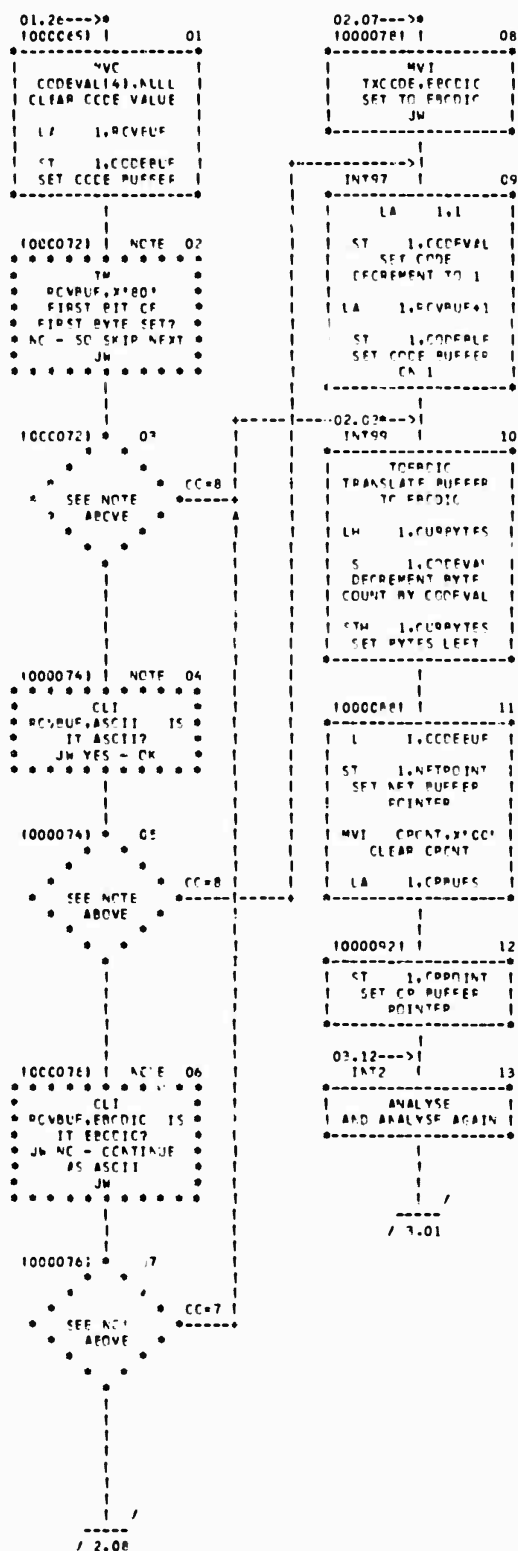


CHART TITLE - 'LOGGER DEVICE CONTROL ROUTINE'

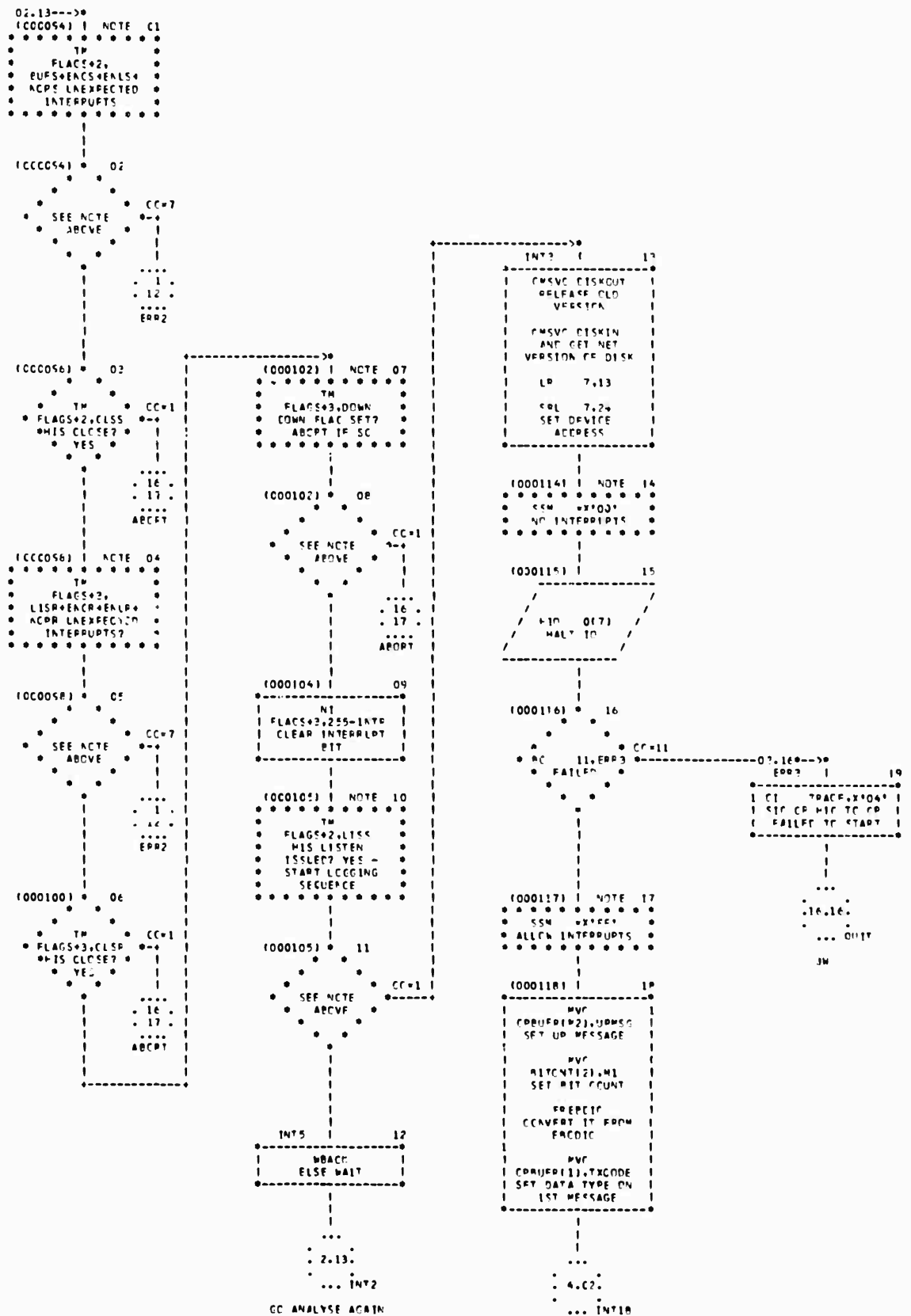


CHART TITLE - 'LOGGER DEVICE CONTROL ROUTINE'

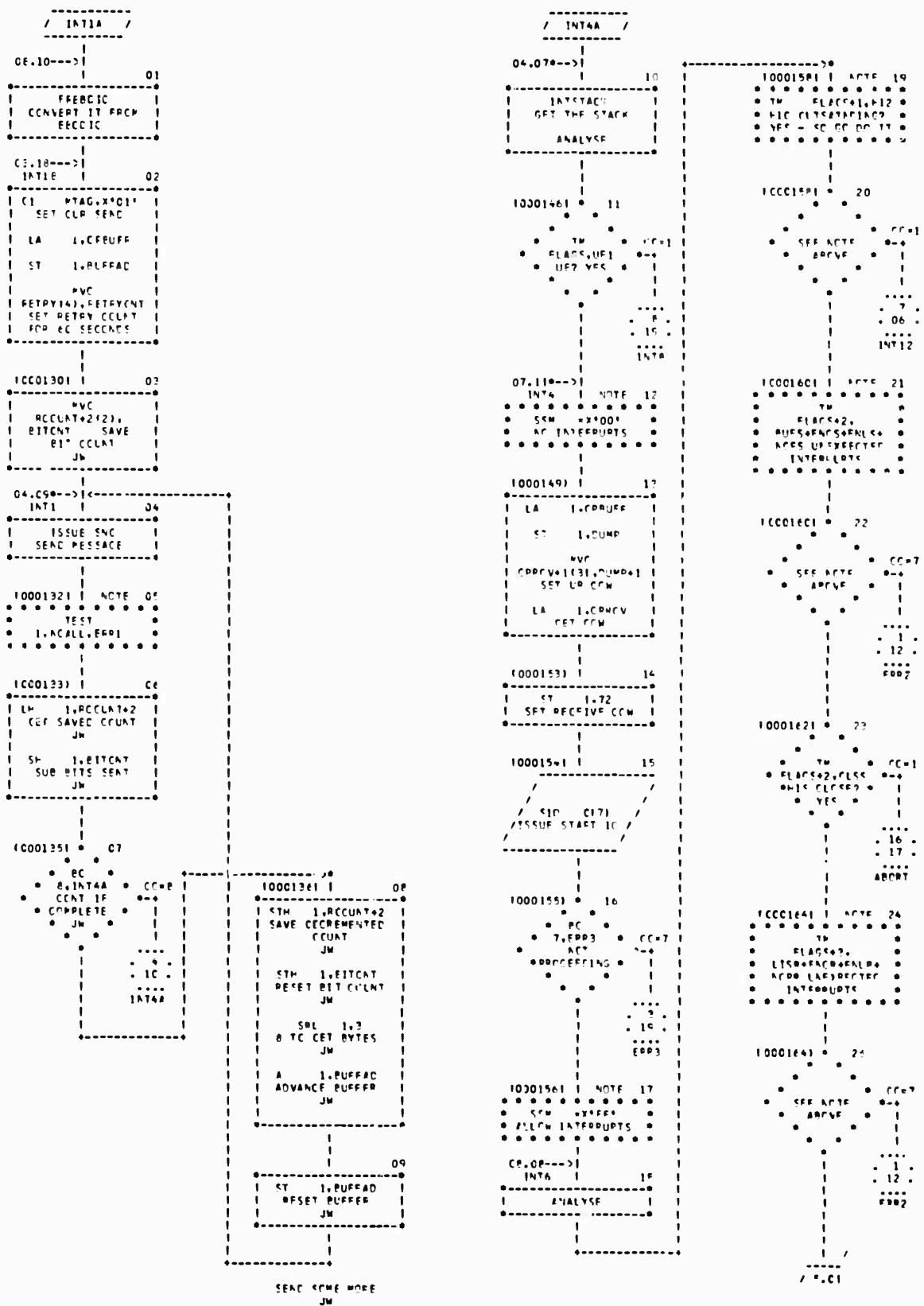
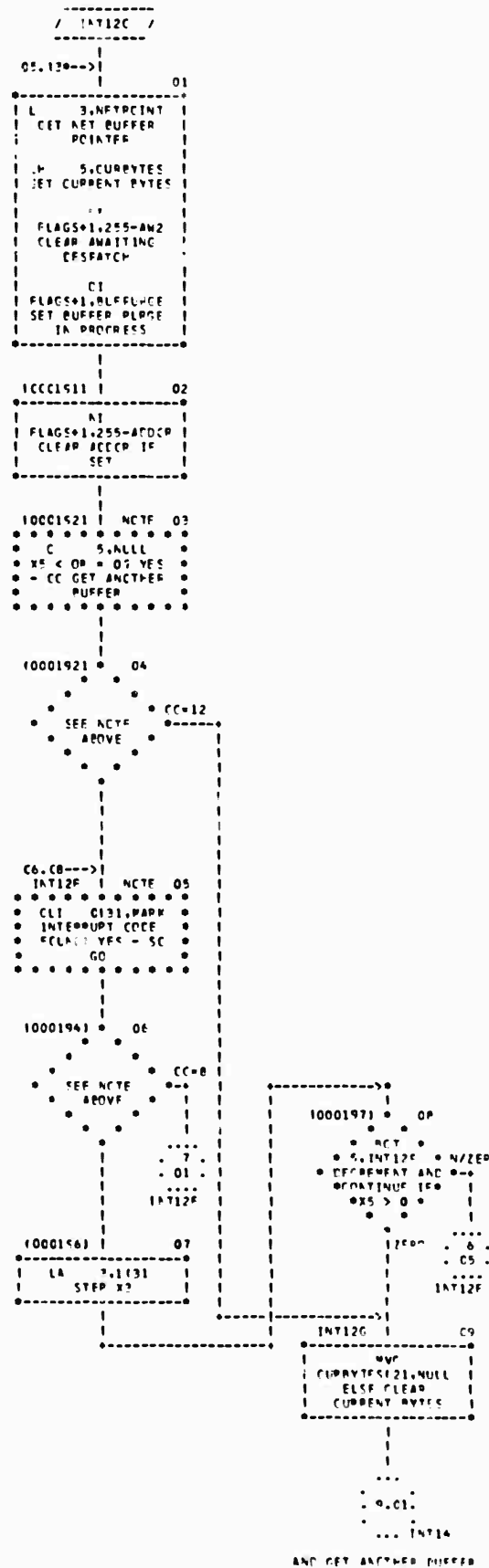


CHART TITLE - 'LOGGER DEVICE CONTROL ROUTINE'



PART TITLE - 'LOGGER DEVICE CONTROL ROUTINE'

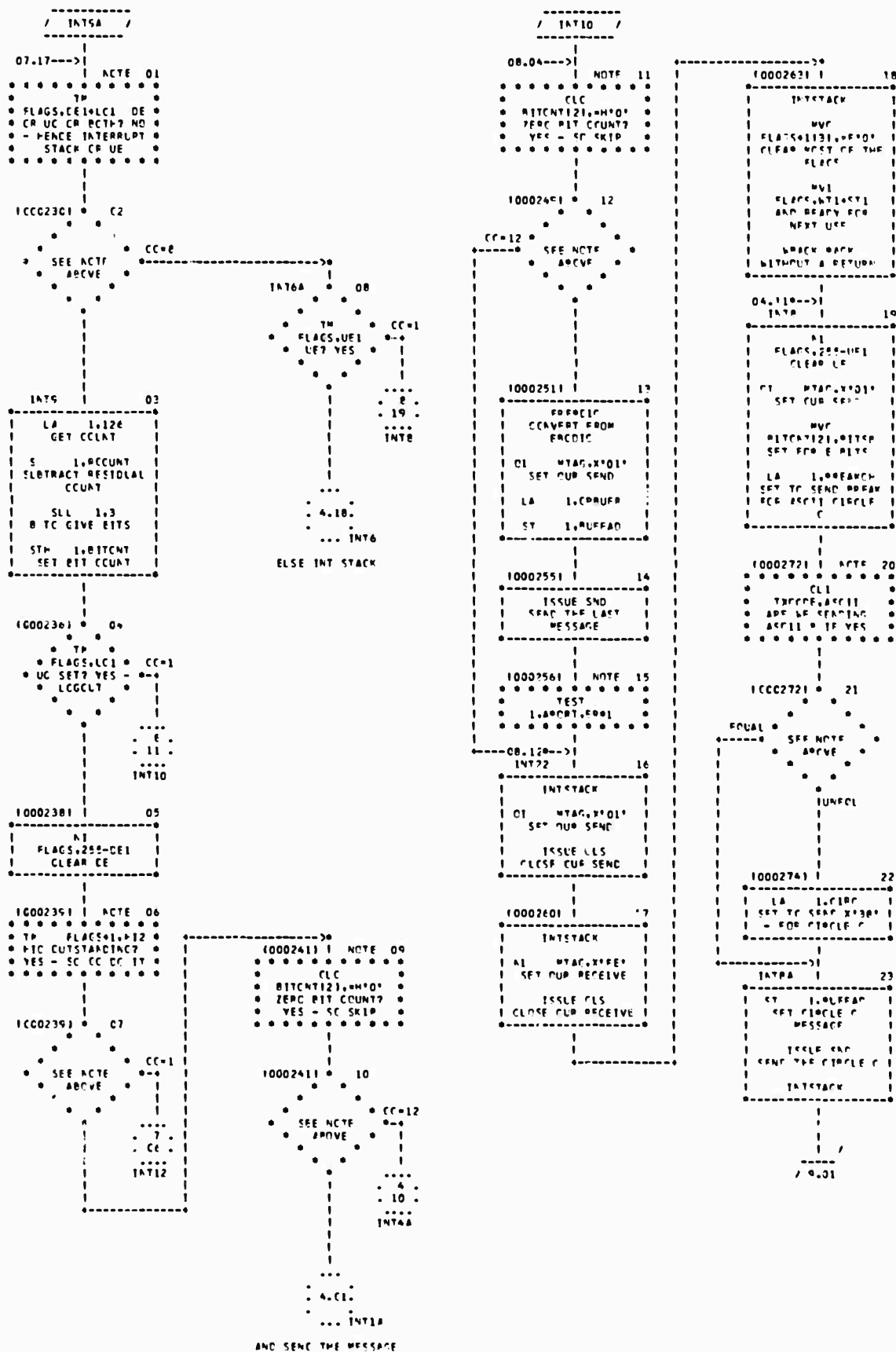


CHART TITLE - 'LOGGER DEVICE CONTROL ROUTINE'

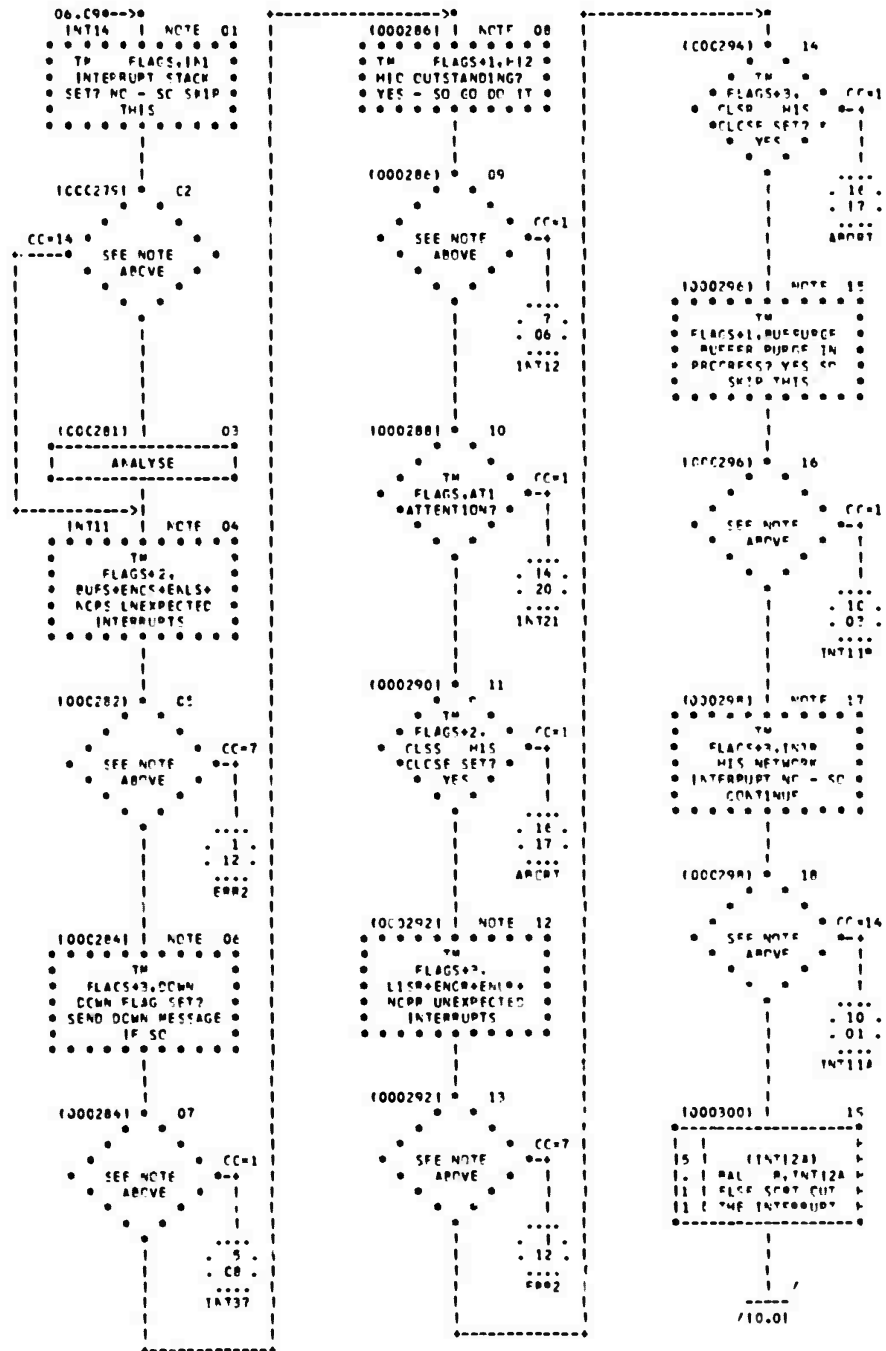


CHART TITLE - 'LOGGER DEVICE CONTROL ROUTINE'

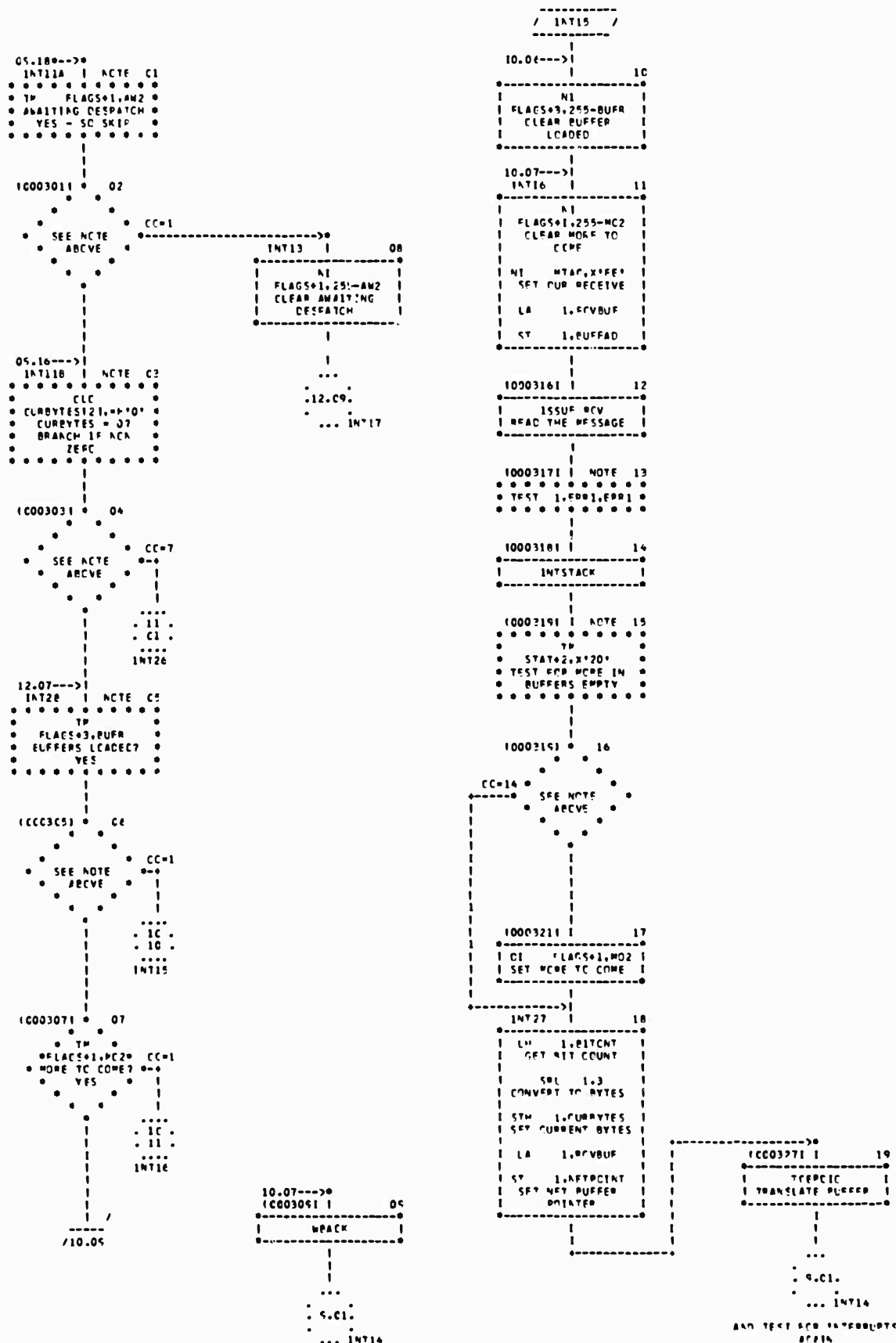


CHART TITLE - 'LOGGER DEVICE CONTROL ROUTINE'

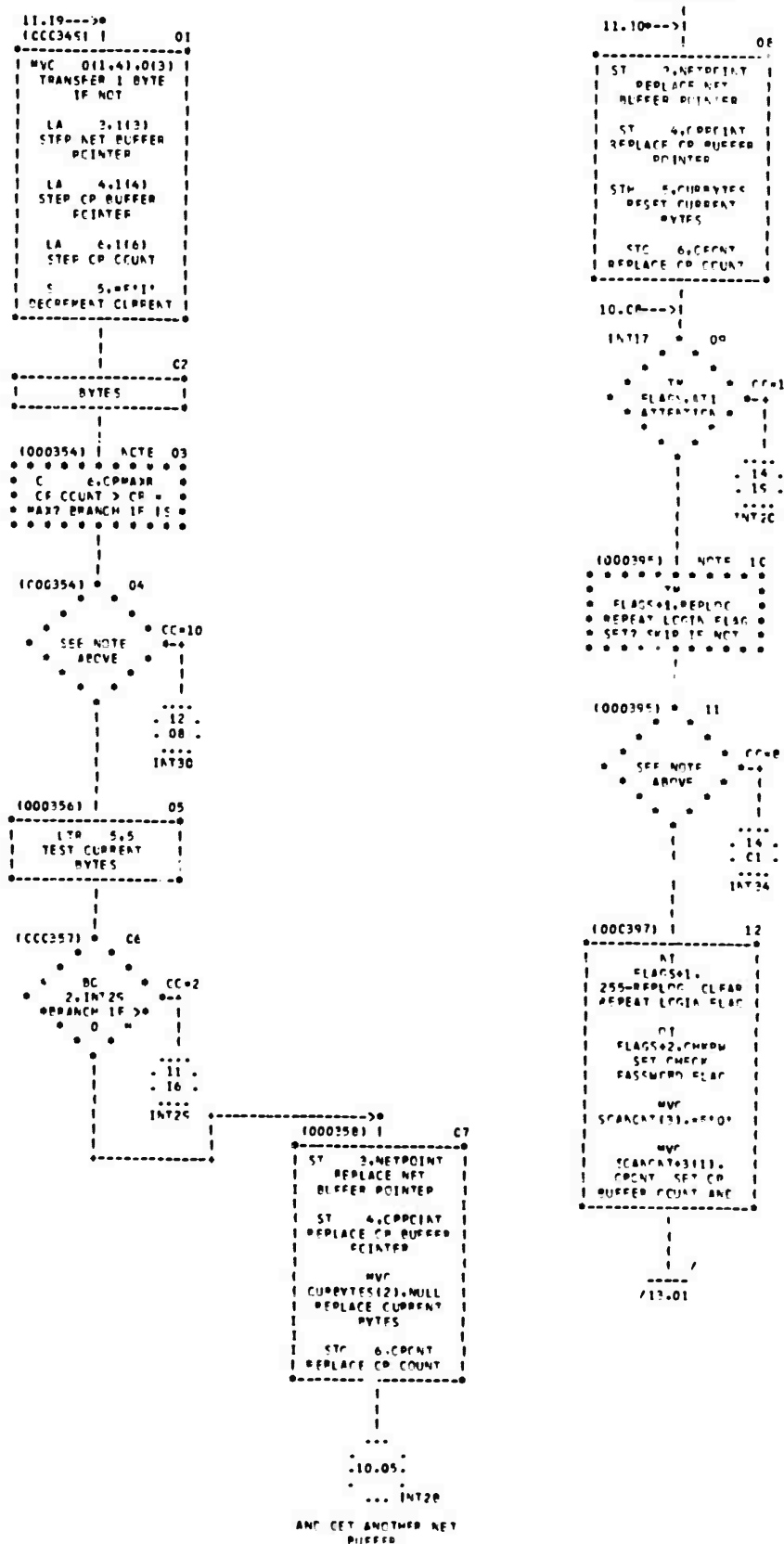


CHART TITLE - 'LOGGER DEVICE CONTROL ROUTINE'

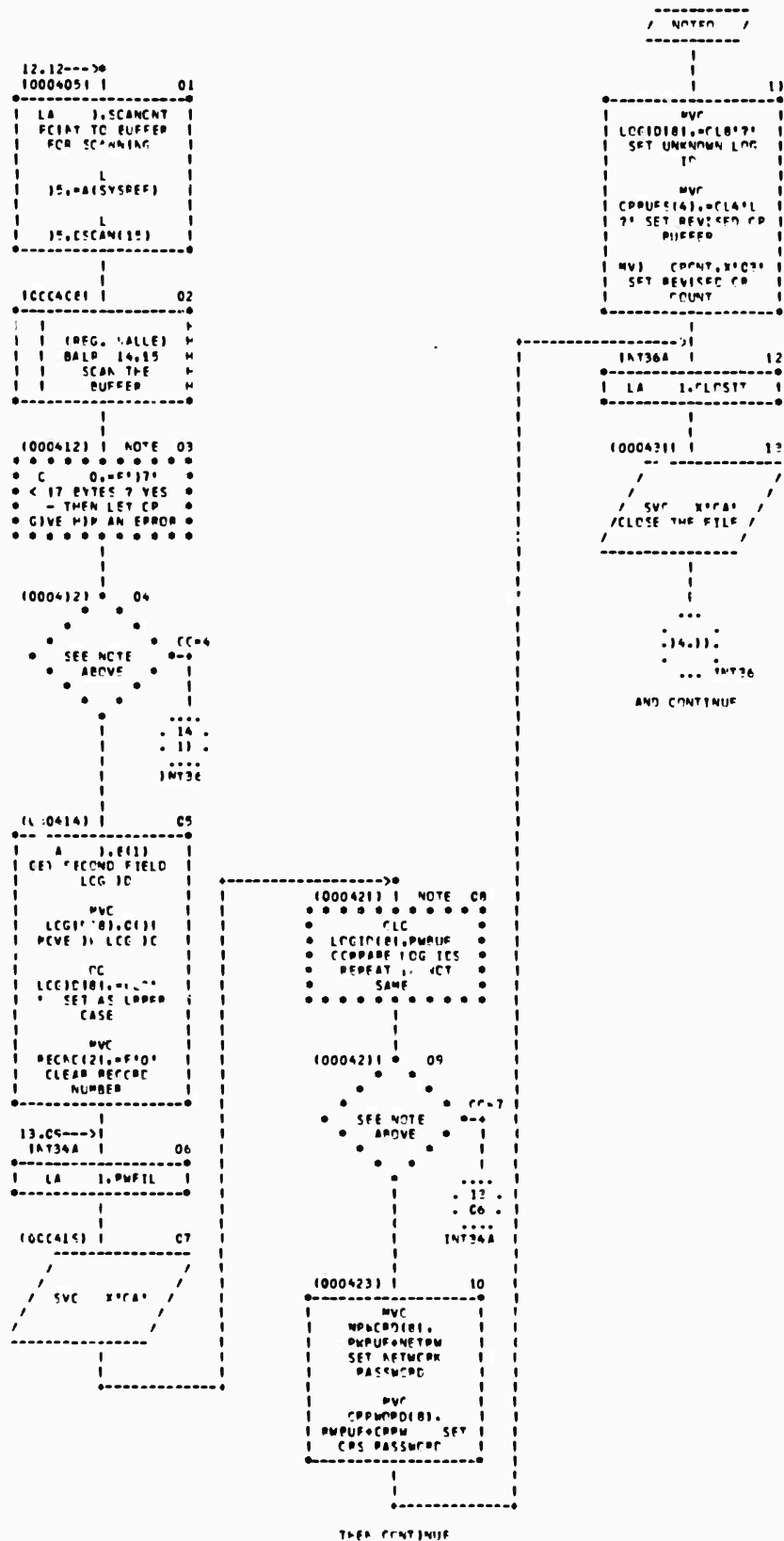


CHART TITLE - 'LOGGER DEVICE CONTROL ROUTINE'

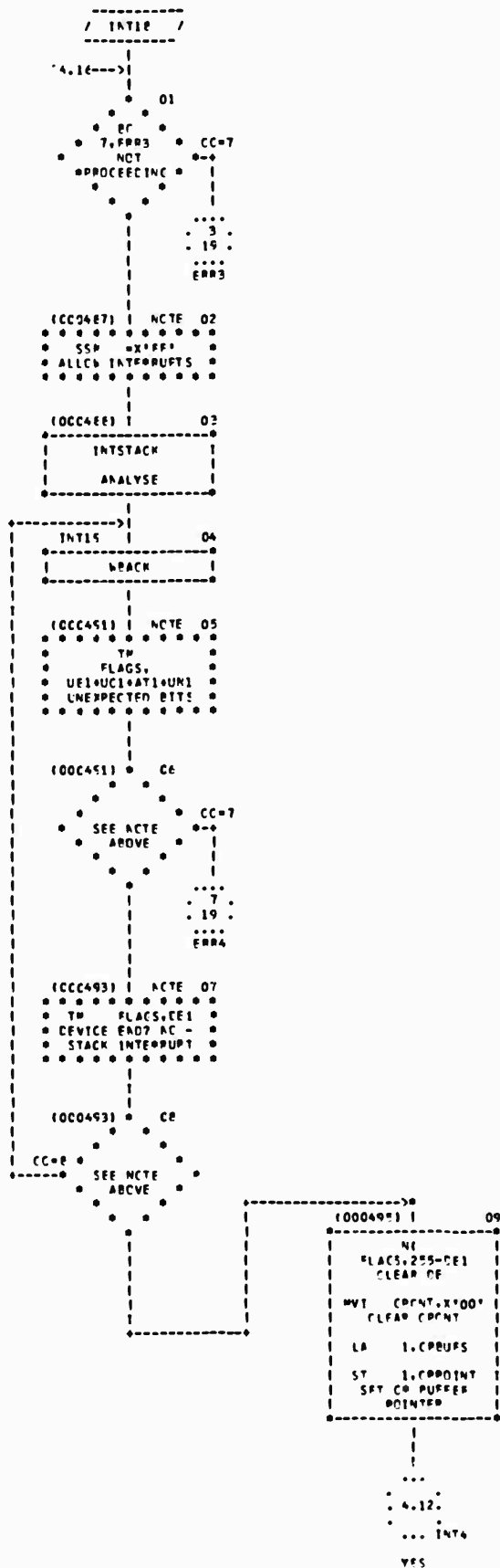


CHART TITLE - 'LOGGER DEVICE CONTROL ROUTINE'

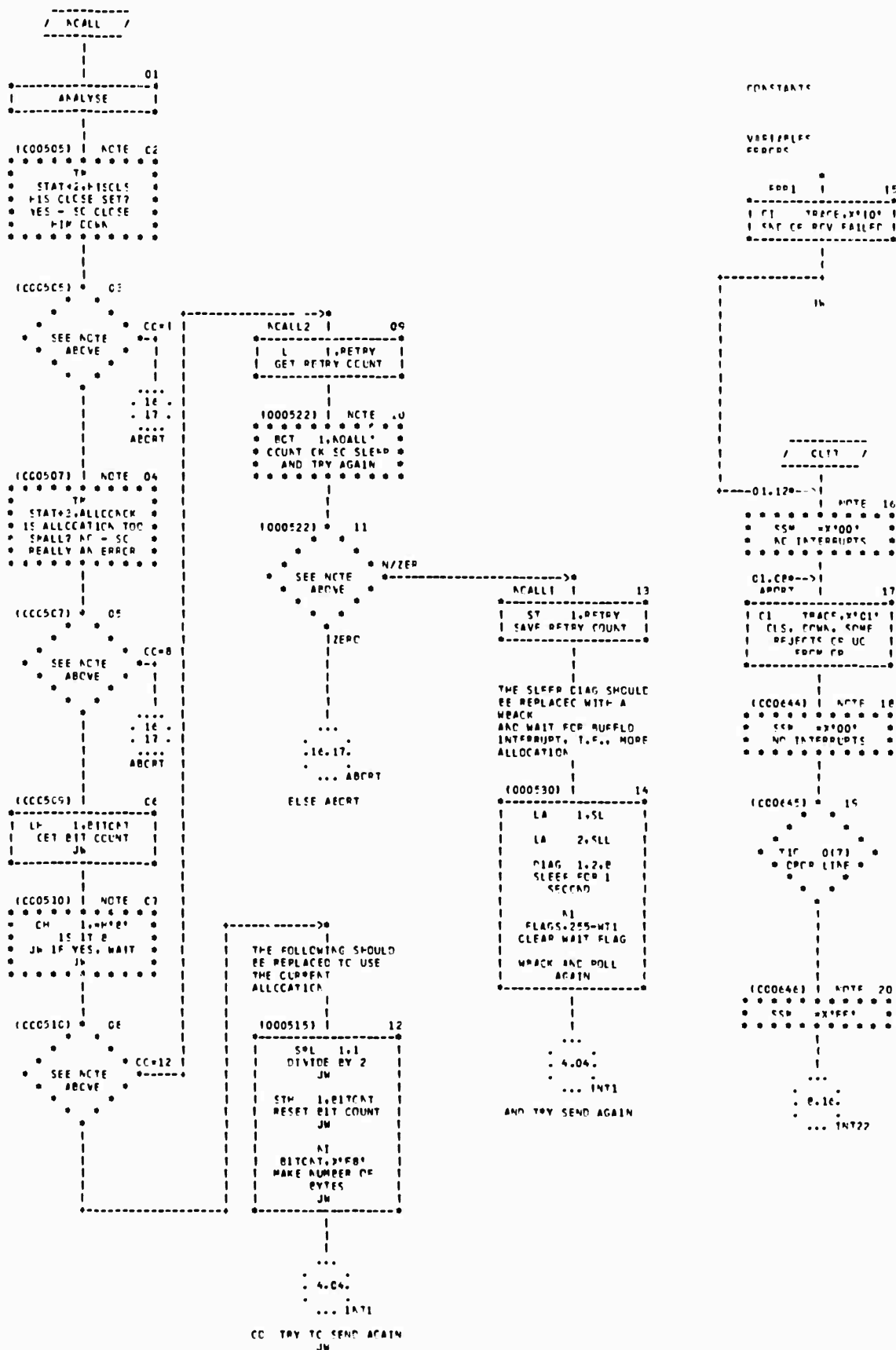


CHART TITLE - 'LOGGER DEVICE CONTROL ROUTINE'

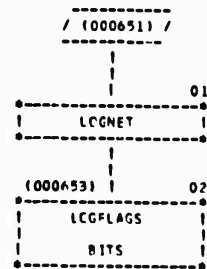


CHART TITLE - EQL STATEMENTS

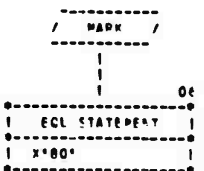
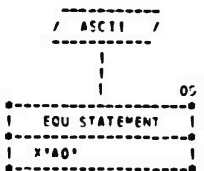
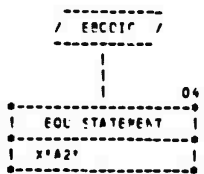
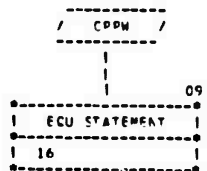
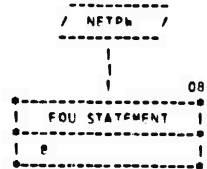
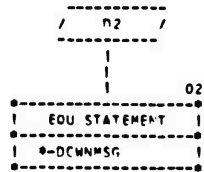
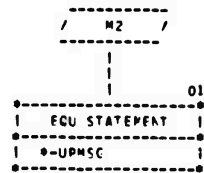


CHART TITLE - CONSTANTS AND STORAGE AREAS

(J00420)	CC	AL4(NDTFC)	NOT FOUND IF FAIL
(000432)	CC	AL4(004)	
(000555)	LPMSC	CC	X'0C' DATA TYPE
(J00556)	CC	C'LINCOLN LABORATORY CP/67 ONLINE'	
(000557)	CC	X'15'	AND NEWLINE
(000560)	P1	CC	AL2((0-UPHSG)*08)
(J00561)	DCWAPSG	CC	C'LOGGER CLOSING DOWN'
(000562)	CC	X'15'	NEWLINE
(000563)	P1	CC	AL2((0-DCWAPSG)*08)
(J00567)	SL	CC	C'SL)'
(000574)	MARKCHAP	CC	X'8C' TELNET DATA MARK
(000575)	BREACHM	CC	X'81' TELNET BREAK AS ASCII CIRCLE C
(J00576)	CIRC	CC	X'30' CIRCLE C = EBCDIC REVERSE BREAK
(000577)	CL	CC	AL2((0-CIRC)*08)
(000578)	P1TSE	CC	X'80' 8 BITS LONG
(000579)	RETRYCNT	CC	F'30' RETRY 30 TIMES
(000593)	PWFIL	CC	CL8'PDBUF'
(000594)	CC	CL8'LCGGFR'	
(000595)	CC	CL8'FILE'	
(000596)	CC	CL2' '	
(000597)	RECNC	CC	X'00'
(000598)	CC	AL4(PWBUF)	
(000599)	CC	F'8C'	
(000600)	CC	CL2'F'	
(000601)	CC	X'11'	
(000602)	CC	F'0C'	
(000603)	PWFIF	CC	BCX'00'
(000604)	CLESTY	CC	CL8'FINIS'
(000607)	CC	CL8'LCGGFR'	
(000608)	CC	CL8'FILE'	
(000609)	CC	CL2'BI'	
(000612)	DISKIN	CC	CL8'DISKIN'
(000613)	CC	CL8'RD'	
(J00614)	CC	CL8'194'	
(000615)	CC	2F'-)'	
(000617)	DISKCL	CC	CL8'DISKCL'
(J00618)	CC	CL8'P'	
(J00619)	CC	2F'-)'	
(000623)	PUMP	DS	1F
(000624)	P	DS	1F
(000625)	TRACE	CC	1F'0C'
(000626)	RETRY	DS	1F
(J00627)	CPHASE	CC	1F'126' MAX CP SEND DIFFER TYPE
(000628)	NULL	CC	1F'0C'
(000629)	CODEPLE	CC	1F'00'
(000630)	CODEVAL	CC	1F'00'

CHART TITLE - 'LOGGER CLEAN UP ROUTINE'

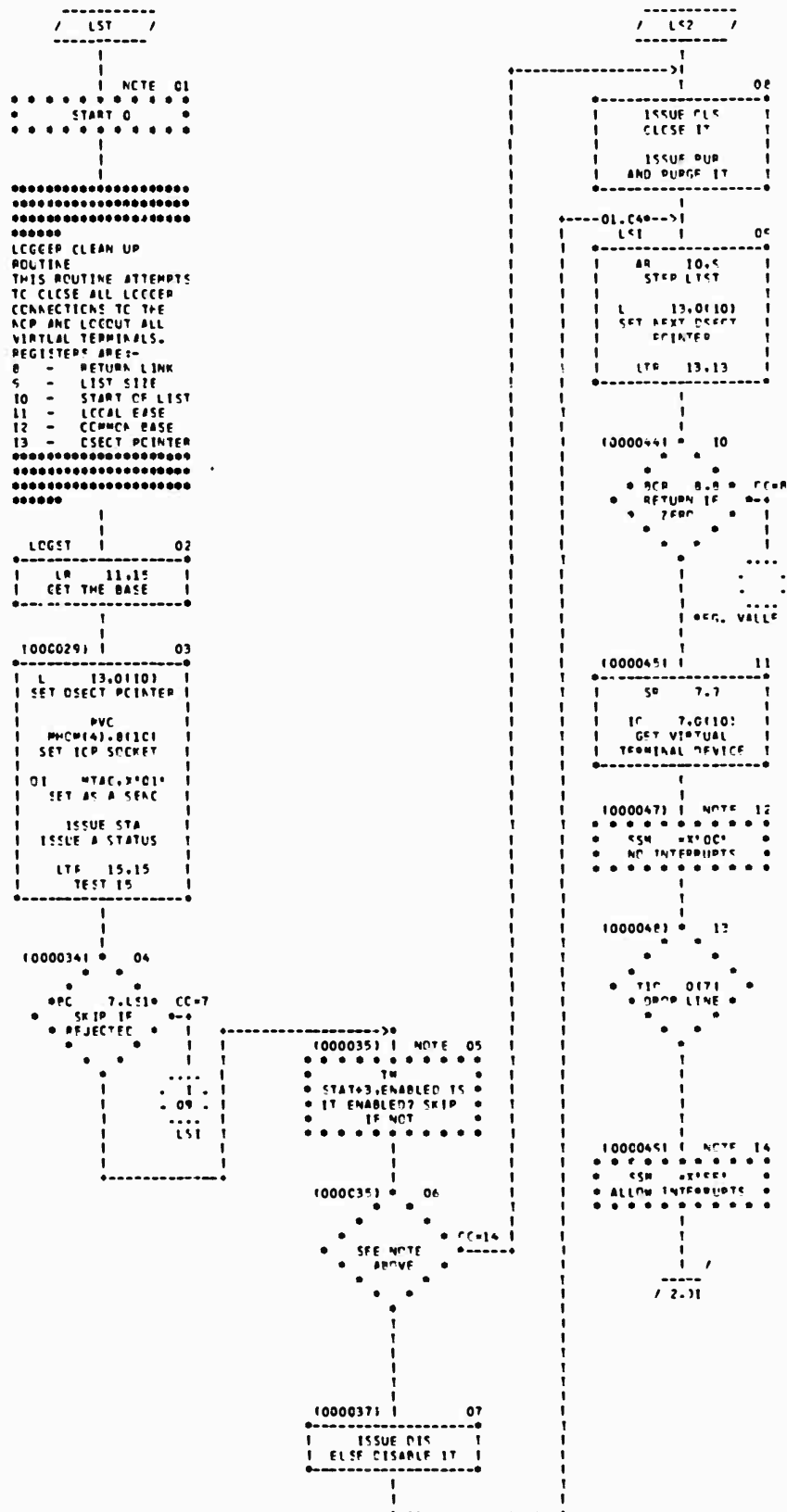


CHART TITLE - 'LOGGER CLEAN UP ROUTINE'

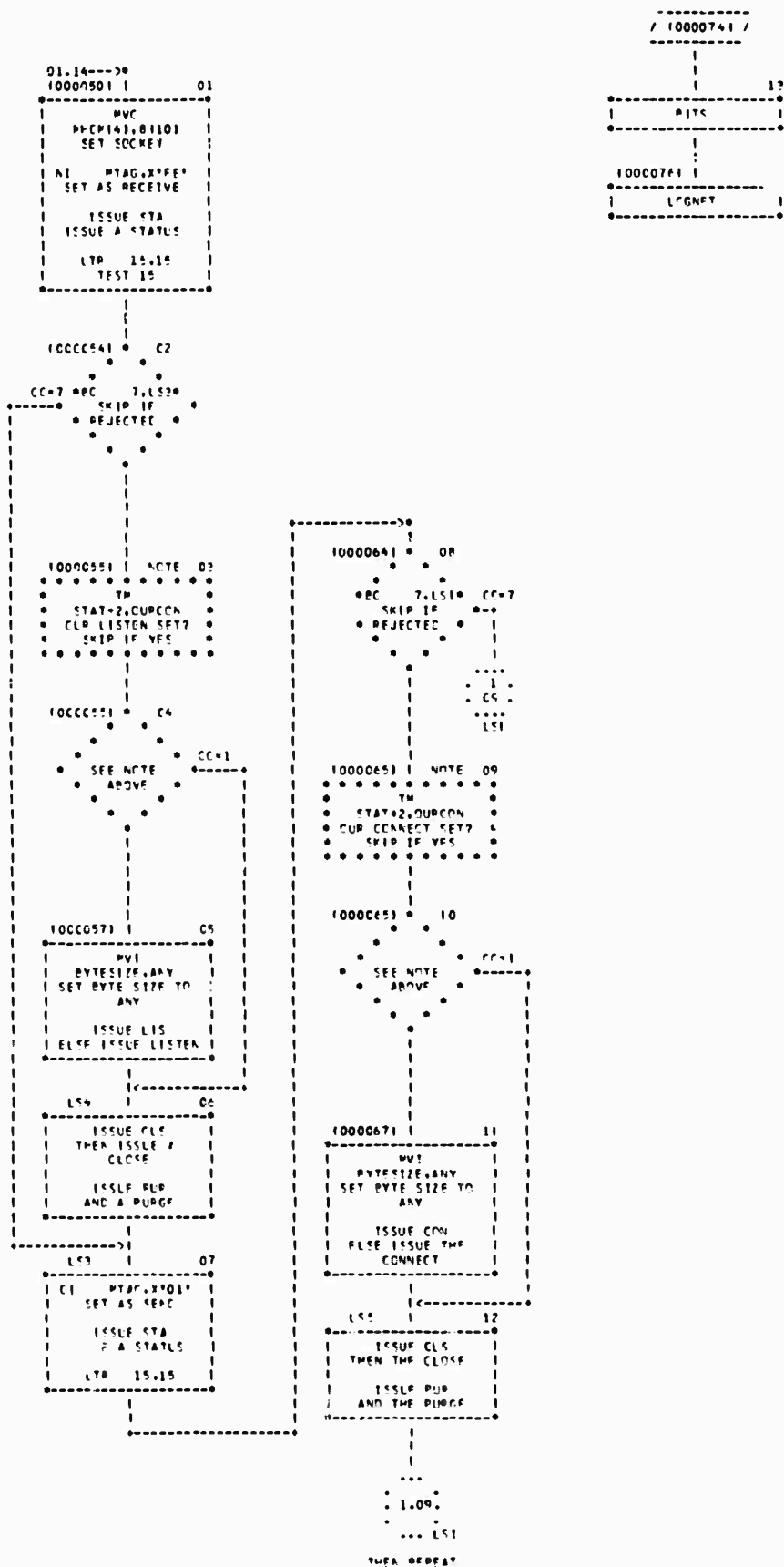


CHART TITLE - ECU STATEMENTS

